LBT-V502/V502CD/V502CDM

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model

- LBT-V502/V502CD/V502CDM is composed of follwing models. As for the service manual, it is issued for each component model, then, please refer to it.

COMPONENT MODEL NAME

COMPONENT \ SYSTEM NUMBER	LBT-V502 (AEP, WG, IT)	LBT-V502 (E2)	LBT-V502 (E3, Saudi, AUS)	LBT-V502CD (UK)	LBT-V502CDM (UK)
TUNER	ST-V502	ST-V502	ST-V502	ST-V502	ST-V502
STEREO DECK AMPLIFIER	DXA-V502	DXA-V502	DXA-V502	DXA-V502	DXA-V502
SPEAKER SYSTEM	SS-A502	SS-D502AV	SS-D502AV	SS-A502	SS-A502
TURNTABLE SYSTEM	————	PS-V702P	————	PS-LX44P	PS-LX44P
CD PLAYER	————	————	————	CDP-M48	CDP-C301M

PARTS LIST

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- WG : West Germany model
IT : Italian model
Saudi : Saudi Arabia model

AUS : Australian model
E2 : E model with turntable system
E3 : E model without turntable system

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-465-455-11	REMOTE COMMANDER (RM-S530)
1-501-369-11	(AEP, UK)...ANTENNA
1-501-374-11	ANTENNA, LOOP
1-575-668-11	CORD (WITH CONNECTOR)
3-701-806-00	(UK, E2)...ADAPTOR, 45, (E)
3-707-584-01	COVER, BATTERY (for RM-S530)
3-751-553-11	(AEP)...MANUAL, INSTRUCTION
3-751-553-41	(AEP)...MANUAL, INSTRUCTION
3-751-553-51	(AEP)...MANUAL, INSTRUCTION
3-751-553-61	(E2, E3, Saudi, AUS)...MANUAL, INSTRUCTION
3-751-553-71	(Saudi)...MANUAL, INSTRUCTION
3-751-555-51	(E2)...MANUAL, INSTRUCTION (PS-V702P)
4-895-478-01	(E2)...INNER PLATE (for PS-V702P)
*4-896-228-01	(E2)...CUSHION (R) (for PS-V702P)
*4-896-229-01	(E2)...CUSHION (L) (for PS-V702P)
*4-896-384-01	(UK)...CUSHION (R) (for PS-LX44P)
*4-896-385-01	(UK)...CUSHION (L) (for PS-LX44P)
*4-914-075-01	CUSHION (SP)
4-920-940-01	SHEET, PROTECTION (for ST-V502)
4-921-934-01	SHEET, PROTECTION (for DXA-V502)
*4-934-860-01	CUSHION (for ST-V502)
*4-935-383-01	CUSHION (for DXA-V502)
*4-937-343-01	(AEP, AUS)...INDIVIDUAL CARTON
*4-937-344-01	(UK:V502CD)...INDIVIDUAL CARTON
*4-937-345-01	(UK:V502CDM)...INDIVIDUAL CARTON
*4-937-347-01	(E2)...INDIVIDUAL CARTON
*4-937-348-01	(E3, Saudi)...INDIVIDUAL CARTON

COMPACT HI-FI STEREO SYSTEM

SONY®

MICROFILM

9-955-676-11

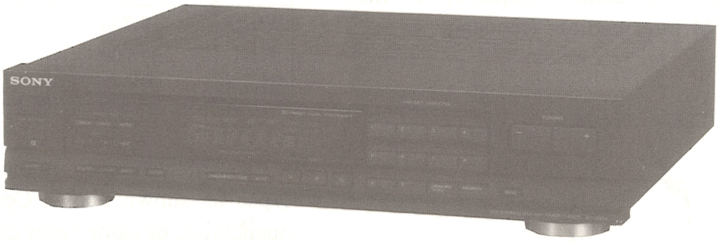
Sony Corporation
Audio Group

English
90C1660-1
Printed in Japan
©1990.3
Published by Customer Relations and Service Group

ST-V502

SERVICE MANUAL

AEP Model
UK Model



This set is FM stereo/FM-AM Tuner section in LBT-V502/V502CD/V502CDG.

SPECIFICATIONS

Tuner	
System	FM stereo FM/AM superheterodyne tuner
FM tuner section	
Tuning range	87.5 to 108 MHz
Antenna	75 ohms unbalanced
Intermediate frequency	10.7 MHz
MW/LW tuner section	
Tuning range	MW: 522 to 1,611kHz (Italian model) 531 to 1,602kHz (other models) LW: 144 to 288kHz (Italian model) 153 to 279kHz (other models)
Antenna	AM loop antenna External antenna terminal
Intermediate frequency	450 kHz
Power requirements	240V AC, 50Hz (UK model) 220V AC, 50Hz (other models)
Power consumption	10 W
AC outlet	2 switched, total 500 W max.
Weight	Approx. 2.4 kg
Dimensions	Approx. 355 × 80 × 312 mm (w/h/d, including projections)

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

MICROFILM

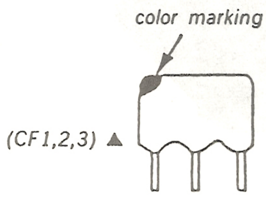
FM STEREO/FM-AM TUNER

SONY®

SECTION 1
SERVICING NOTES

Note on Ceramic Filter (CF1,2,3) ▲ Replacement.

This set employs three ceramic filters (CF1,2,3) ▲ which should have the same color marking to identify their center frequency. Therefore FM IF offset adjustment by ∗ D609, ∗ D610 is necessary to match the center frequency of the ceramic filters used with FM intermediate frequency.



○ : Mounted
× : not Mounted

Ceramic filter		Mount		FM intermediate frequency (MHz)
Color mark	Center frequency (MHz)	∗ D609	∗ D610	
White	10.750	○	×	10.750
Red	10.700	×	×	10.700
Black	10.650	×	○	10.650

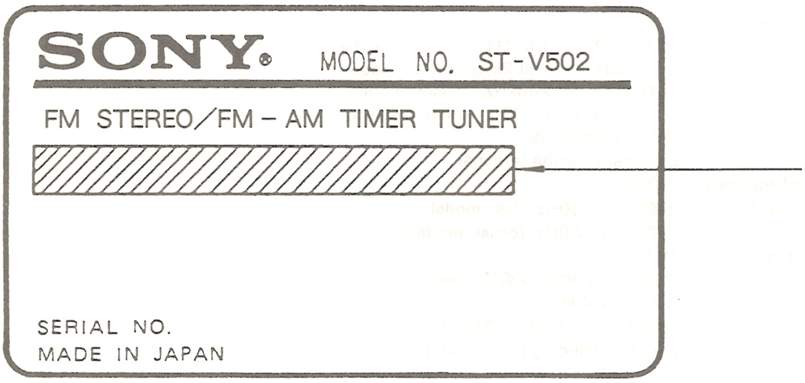
FM intermediate frequency is determined by the three types as shown above, Ceramic filters of same center frequency,i.e., of same color coding should be used for CF1, CF2, and CF3.

When replacing the ceramic filters, perform the FM Discriminator Adjustment.

▲ : AEP, UK Model : CF1, 2
WG, IT Model : CF1, 2, 3

MODEL IDENTIFICATION

– Specification Label –



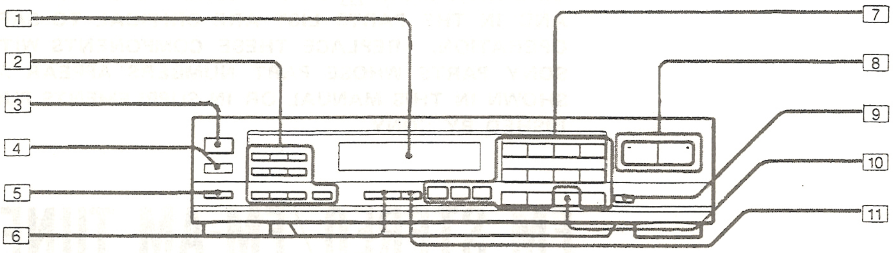
SONY® MODEL NO. ST-V502

FM STEREO/FM – AM TIMER TUNER

SERIAL NO.
MADE IN JAPAN

AEP, West Germany,
Italian Model : AC : 220V ~ 50/60 Hz
UK Model : AC : 240V ~ 50/60 Hz

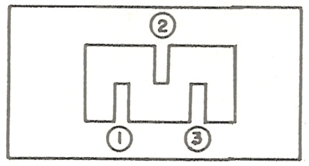
LOCATION OF CONTROLS



1	Display window
2	Buttons for setting the clock and timer
3	SYSTEM POWER switch
4	Remote sensor
5	SLEEP button
6	FREQUENCY/TIME button
7	Buttons for storing station frequencies
8	TUNING buttons
9	BAND selector
10	MEMORY SCAN button
11	AUTO tuning button

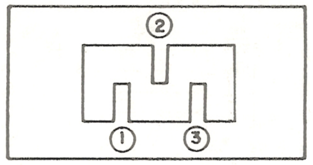
Signal of System Control Connector

CNJ901
SYSTEM CONTROL 1



1	L-CH OUT
2	GND
3	R-CH OUT

CNJ701
SYSTEM CONTROL 2



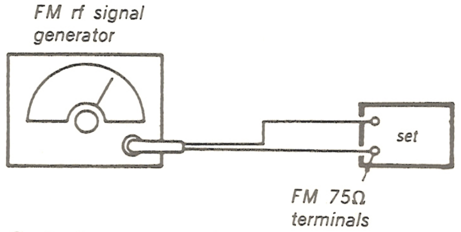
1	AUB
2	GND
3	

SECTION 2
ELECTRICAL ADJUSTMENTS

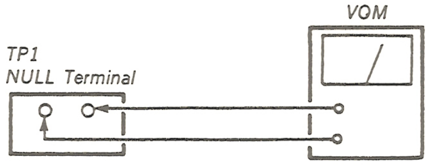
FM SECTION

FM DISCRIMINATOR ADJUSTMENT

Setting:


FM rf signal generator
set
FM 75Ω terminals

Carrier frequency : *98MHz*
Modulation : *1kHz, 40kHz deviation (100%)*
Output level : *1mV (60dB)*


VOM
TP1
NULL Terminal

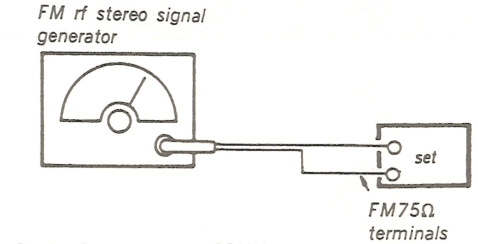
Procedure :

1. Tune the set to 98MHz.
2. Adjust T21 for 0V reading on the VOM.

Note : FM tuning level adjustment should be made after FM discriminator alignment.

FM TUNING LEVEL ADJUSTMENT

Setting :


FM rf stereo signal generator
set
FM75Ω terminals

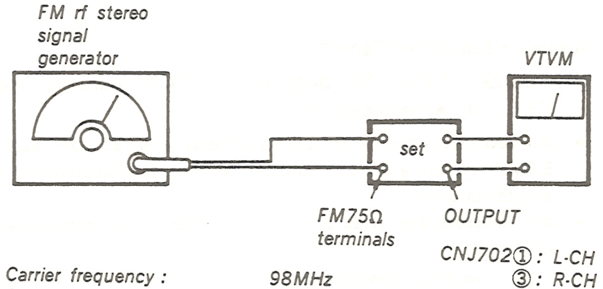
Carrier frequency : *98MHz*
Modulation : *1kHz, 40kHz deviation (100%)*
Output level : *17.8μV (25dB)*

Procedure :

1. Tune the set to 98MHz.
2. Adjust RV24 so that the TUNED LED goes on.

FM STEREO SEPARATION ADJUSTMENT

Procedure :


FM rf stereo signal generator
VTVM
set
FM75Ω terminals
OUTPUT
CNJ702①: L-CH
③: R-CH

Carrier frequency : *98MHz*
Output level : *1mV (60dB)*
Modulation
Audio 400Hz : *16.25kHz deviation*
Sub channel 38kHz : *16.25kHz deviation*
Pilot signal 19kHz : *7.5kHz deviation*

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV21 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV21 for minimum reading.

L-CH Stereo separation : Ⓐ−Ⓑ
R-CH Stereo separation : Ⓒ−Ⓓ

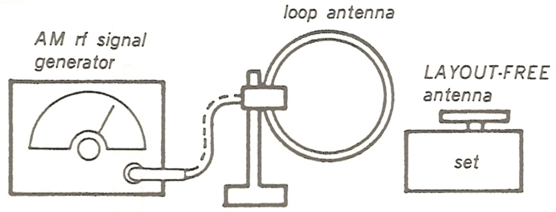
The separations of both channels should be equal.

MW/LW SECTION

AM TUNING LEVEL ADJUSTMENT

BAND select switch : LW

Setting :

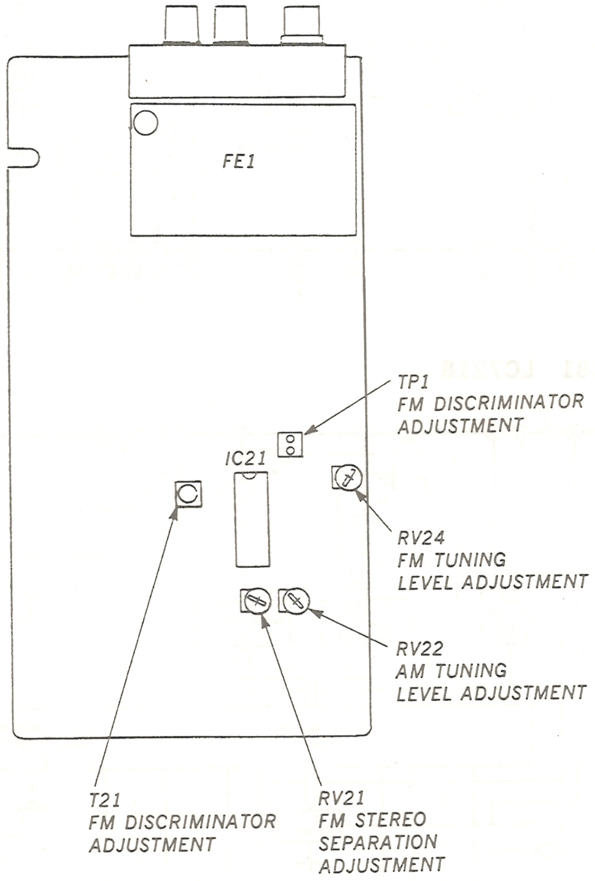

AM rf signal generator
loop antenna
LAYOUT-FREE antenna
set

Carrier frequency : *216kHz*
Modulation : *400Hz, 30% modulation*

Procedure :

1. Set loop antenna so that the LAYOUT-FREE antenna input level becomes 2.5mV/m (68dB).
2. Tune the set to 216kHz.
3. Adjust the RV22 so that the TUNED LED goes on.

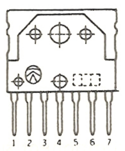
Adjustment Location :
—tuner board—


FE1
IC21
TP1 FM DISCRIMINATOR ADJUSTMENT
RV24 FM TUNING LEVEL ADJUSTMENT
RV22 AM TUNING LEVEL ADJUSTMENT
T21 FM DISCRIMINATOR ADJUSTMENT
RV21 FM STEREO SEPARATION ADJUSTMENT

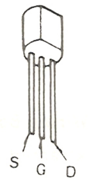
SECTION 3
DIAGRAMS

3-1. SEMICONDUCTOR LEAD LAYOUTS

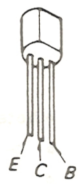
LA5667



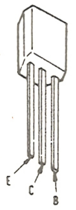
2SK246-GR3



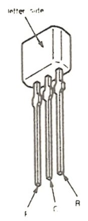
2SB1116A-L



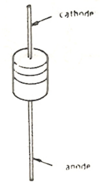
DTA144ES
DTC114ES
2SA1317-STU
2SC2603-EF
2SC2669-OY
2SC3113-A
2SC3330-STU
2SC3402



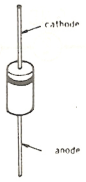
2SC2785-HFE



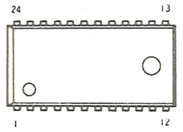
HZS27-2L
1SS120


cathode
anode

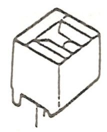
UZP-6.8B
10E2N


cathode
anode

LC7218

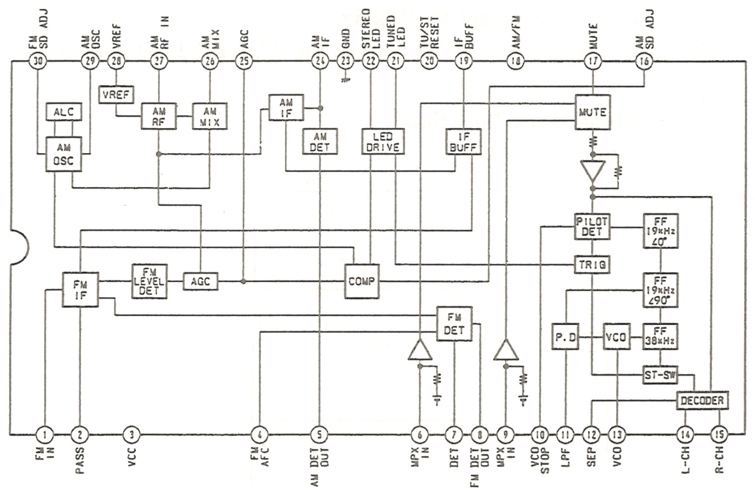


GP1U52XB

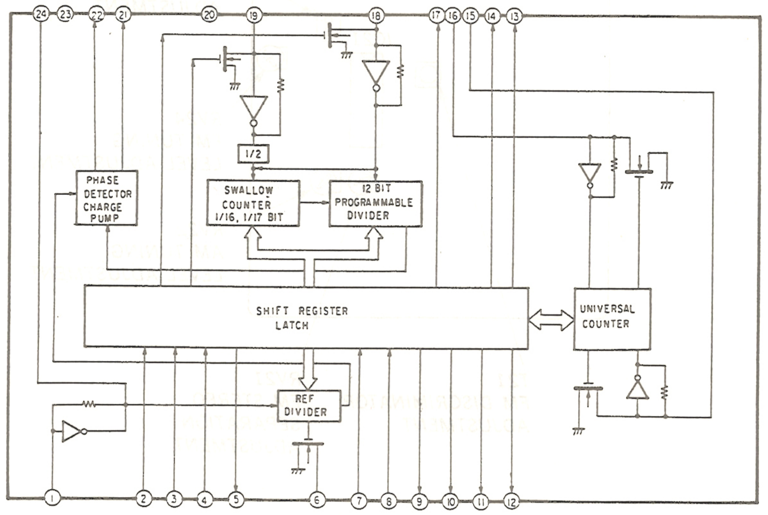


3-2. IC BLOCK DIAGRAMS

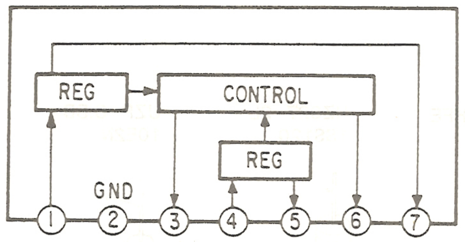
IC21 LA1851N


FM SD ADJ
AM OSC
VREF
AM RF IN
AM MIX
AGC
AM IF
GND
STEREO LED
TUNED LED
TU/ST RESET
IF BUFF
AM/FM
MUTE
AM SD ADJ
ALC
AM OSC
VREF
AM RF
AM MIX
AM IF
AM DET
LED DRIVE
IF BUFF
MUTE
PILOT DET
FF 19kHz ∠0°
TRIG
FF 19kHz ∠90°
P.D
VCO
FF 38kHz
ST-SW
DECODER
FM IF
FM LEVEL DET
AGC
COMP
FM DET
FM IN
PASS
VCC
FM AFC
AM DET OUT
MPX IN
DET
FM DET OUT
MPX IN
VCO STOP
LPF
SEP
VCO
L-CH
R-CH

IC81 LC7218


PHASE DETECTOR CHARGE PUMP
1/2
SWALLOW COUNTER 1/16, 1/17 BIT
12 BIT PROGRAMMABLE DIVIDER
SHIFT REGISTER LATCH
UNIVERSAL COUNTER
REF DIVIDER

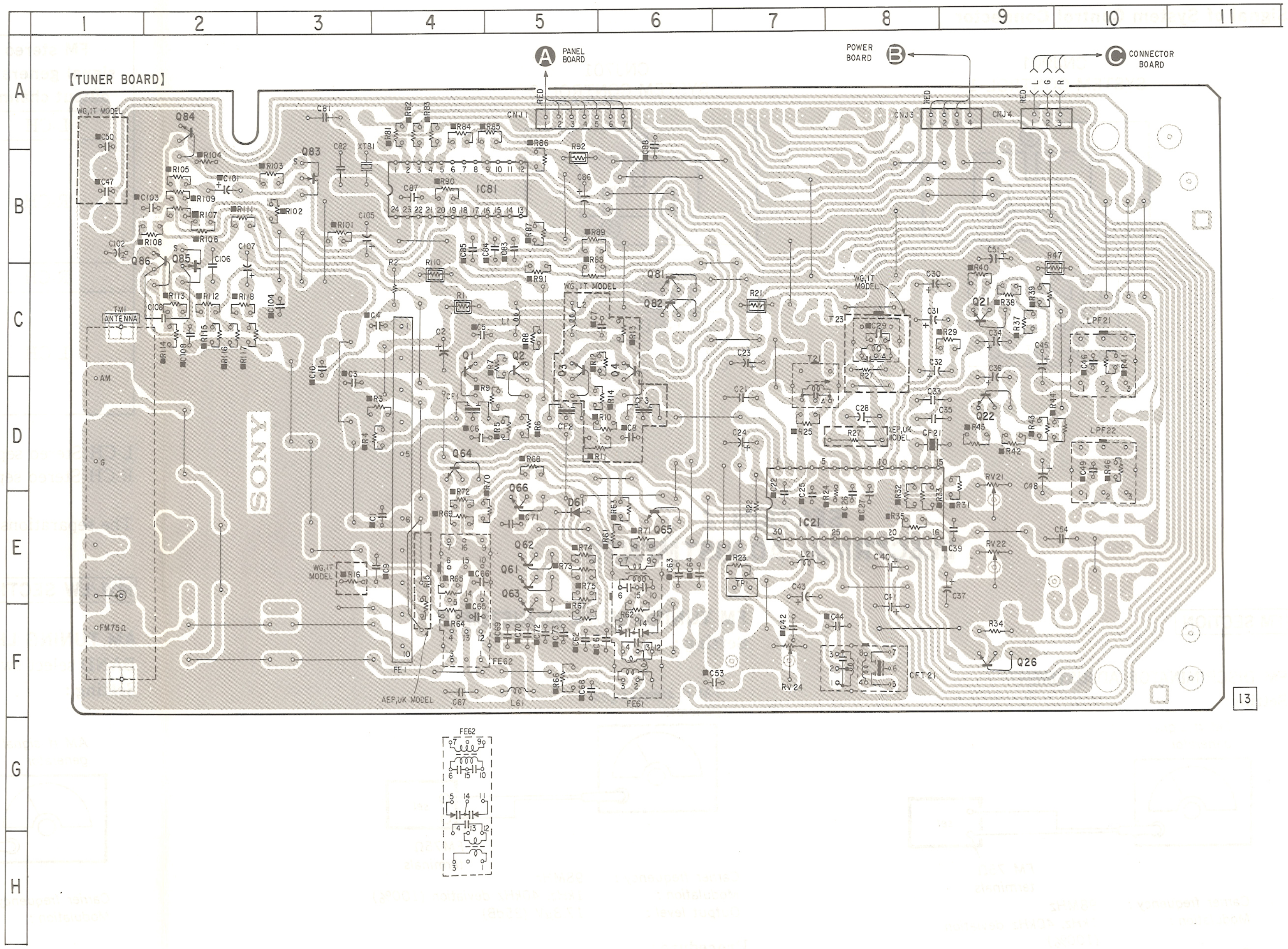
IC701 LA5667


REG
CONTROL
REG
GND
1
2
3
4
5
6
7

3-3. TUNER SECTION PRINTED WIRING BOARD

• Semiconductor Location

Ref. No.	Location
D61	E-5
IC21	E-8
IC81	B-4
Q1	D-4
Q2	D-5
Q3	D-5
Q4	D-6
Q21	C-9
Q22	D-9
Q26	F-9
Q61	E-5
Q62	E-5
Q63	F-6
Q64	D-4
Q65	E-6
Q66	E-5
Q81	C-6
Q82	C-6
Q83	B-3
Q84	A-2
Q85	C-2
Q86	C-2


1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
A PANEL BOARD
POWER BOARD B
C CONNECTOR BOARD
[TUNER BOARD]
CNJ1
CNJ3
CNJ4
IC81
IC21
SONY
TM1 ANTENNA
AM
FM75Ω
WG, IT MODEL
AEP, UK MODEL
FE61
FE62
CF21
LPF21
LPF22
Q26
13

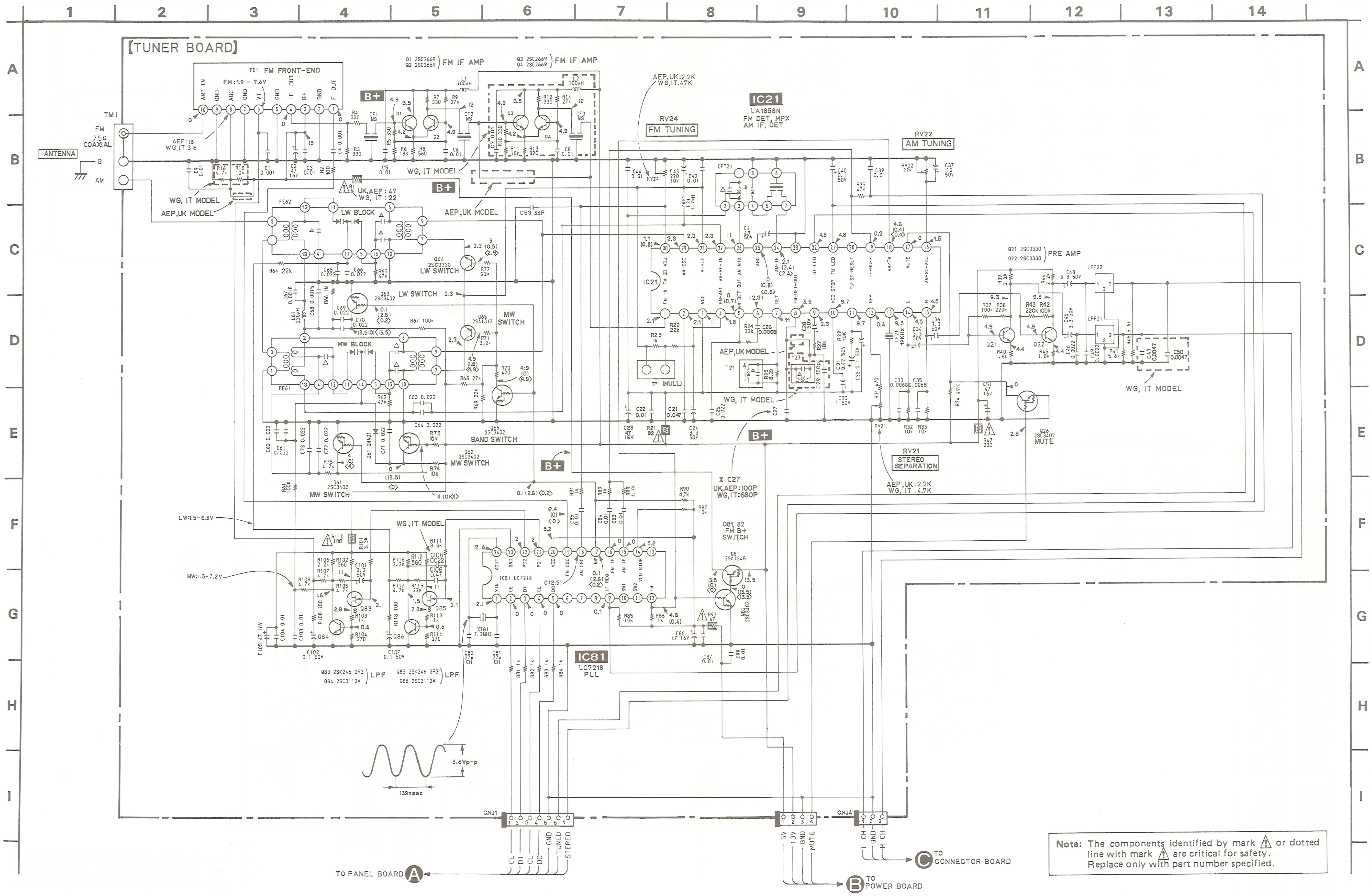
• Note on Printed Wiring Board

- ○—— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- [ ]- indicates side identified with part number.
- WG: West Germany model
- IT: Italian model

• Note on Schematie Digmam

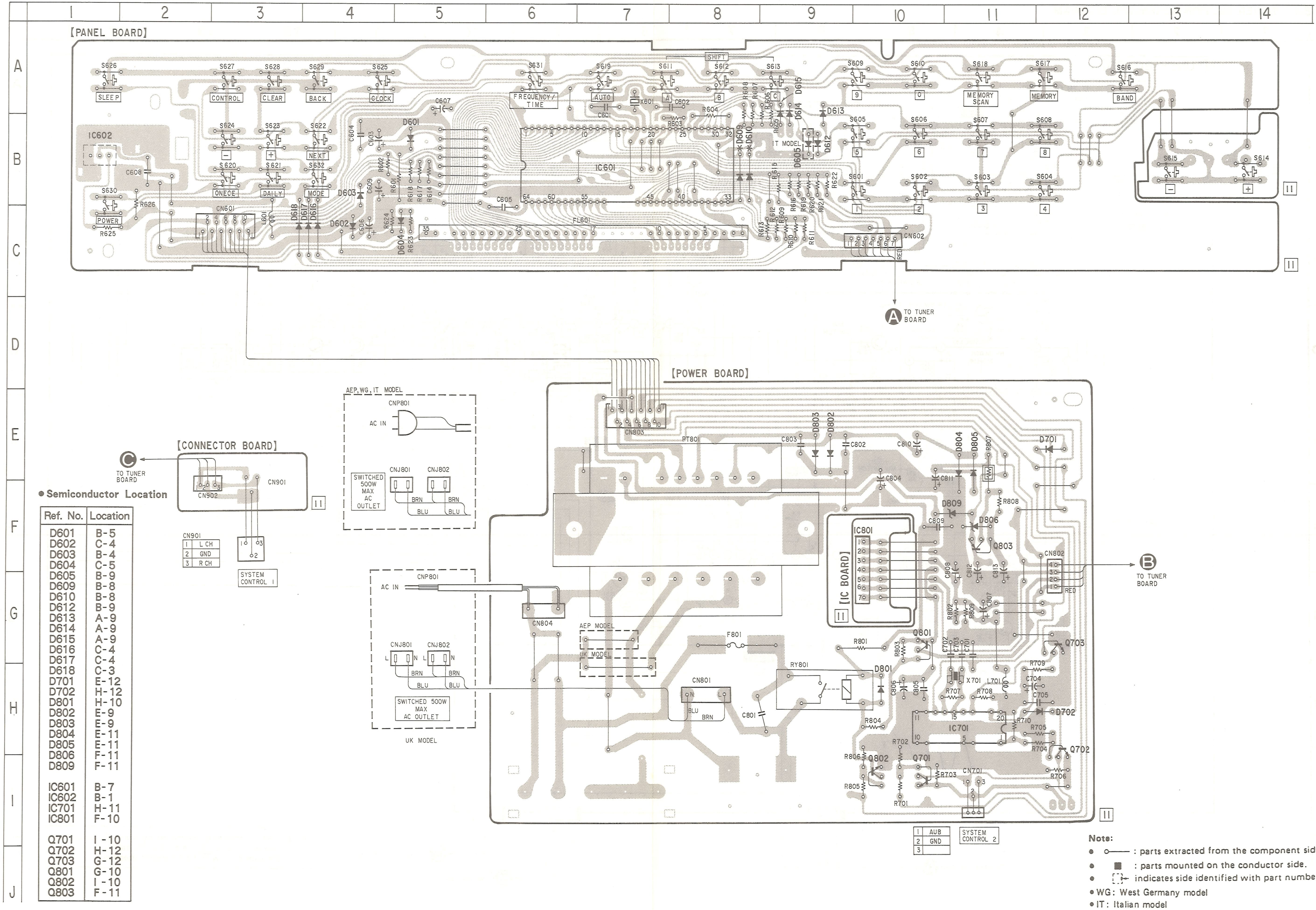
- *D609, *D610: See page 2 for Note on Ceramic Filter (CF1, 2, 3) ▲ Replacement.
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : nonflammable resistor.
- B+ : B+ Line
- B− : B− Line
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  - no mark : FM
  - ( ) : AM
  - 〈 〉 : LW
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  - ⇨ : FM
- WG: West Germany model
- IT : Italian model

3-4. TUNER SECTION SCHEMATIC DIAGRAM


【TUNER BOARD】
FE1 FM FRONT-END
FM:1.9 - 7.6V
ANT IN
GND
AGC
VT
IF OUT
B+
F OUT
Q1 2SC2669
Q2 2SC2669
FM IF AMP
Q3 2SC2669
Q4 2SC2669
FM IF AMP
TM1
FM 75Ω COAXIAL
ANTENNA
G
AM
AEP:13
WG,IT:3.6
WG, IT MODEL
AEP,UK MODEL
UK,AEP:47
WG, IT:22
FE62
LW BLOCK
AEP,UK MODEL
C53 33P
Q64 2SC3330 LW SWITCH
Q63 2SC3402 LW SWITCH
Q65 2SA1317 MW SWITCH
MW BLOCK
FE61
Q66 2SC3402 BAND SWITCH
Q62 2SC3402 MW SWITCH
Q61 2SC3402 MW SWITCH
LW:1.5-6.3V
MW:1.3-7.2V
WG,IT MODEL
AEP,UK:2.2K
WG,IT:47K
RV24 FM TUNING
IC21
LA1858N
FM DET, MPX
AM IF, DET
RV22 AM TUNING
CFT21
FM-IN
FM-SD-ADJ
AM-OSC
V-REF
AM-RF-IN
AM-MIX
AGC
AM-IF
ST-LED
TU-LED
TU-ST-RESET
IF-BUFF
AM/FM
MUTE
AM-SD-ADJ
VCC
FM-AFC
FM-DET-OUT
AM-DET-OUT
DET
VCO-STOP
SEP
L
R
Q21 2SC3330
Q22 2SC3330
PRE AMP
LPF22
LPF21
WG, IT MODEL
AEP,UK MODEL
T21
T23
TP1 (NULL)
WG, IT MODEL
RV21 STEREO SEPARATION
AEP,UK:2.2K
WG,IT:4.7K
Q26 2SC3402 MUTE
B+
X C27
UK,AEP:100P
WG,IT:680P
Q81, 82 FM B+ SWITCH
Q81 2SA1348
Q82 2SC3402
IC81 LC7218
XOUT
PD2
PD1
VDD
FM OSC
AM OSC
IF REQ
AM IF
FM IF
VCO STOP
XIN
CE
DI
CL
DO
SW1
SW2
FM
X181 7.2MHZ
IC81
LC7218
PLL
Q83 2SK246 GR3
Q84 2SC3112A
LPF
Q85 2SK246 GR3
Q86 2SC3112A
LPF
3.8Vp-p
139nsec
CNJ1
CE
DI
CL
DO
GND
TUNED
STEREO
TO PANEL BOARD Ⓐ
5V
13V
GND
MUTE
TO POWER BOARD Ⓑ
CNJ4
L CH
GND
R CH
TO CONNECTOR BOARD Ⓒ

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

3-5. CONTROL AND POWER SUPPLY SECTION PRINTED WIRING BOARDS


[PANEL BOARD]
[POWER BOARD]
[CONNECTOR BOARD]
[IC BOARD]
SLEEP
CONTROL
CLEAR
BACK
CLOCK
FREQUENCY/TIME
AUTO
SHIFT
MEMORY SCAN
MEMORY
BAND
NEXT
ONECE
DAILY
MODE
POWER
IC601
IC602
IC701
IC801
FL601
CN601
CN602
CN803
CN804
CN801
CN802
CN701
CN901
CN902
PT801
F801
RY801
TO TUNER BOARD
AEP,WG,IT MODEL
CNP801
AC IN
CNJ801
CNJ802
SWITCHED 500W MAX AC OUTLET
BRN
BLU
UK MODEL
AEP MODEL
IT MODEL
SYSTEM CONTROL 1
SYSTEM CONTROL 2
1 L CH
2 GND
3 R CH
1 AUB
2 GND
3
RED

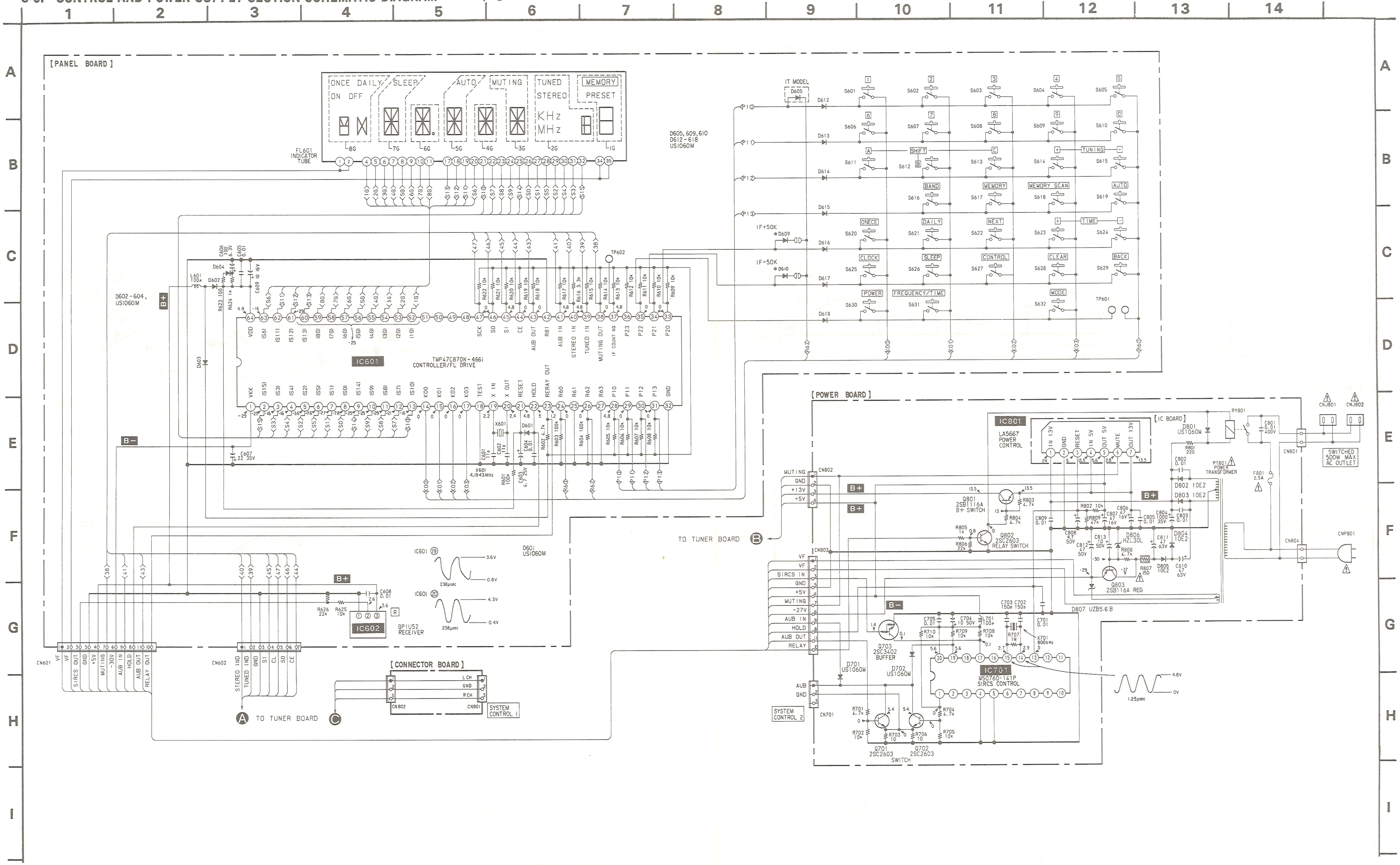
• Semiconductor Location

Ref. No.	Location
D601	B-5
D602	C-4
D603	B-4
D604	C-5
D605	B-9
D609	B-8
D610	B-8
D612	B-9
D613	A-9
D614	A-9
D615	A-9
D616	C-4
D617	C-4
D618	C-3
D701	E-12
D702	H-12
D801	H-10
D802	E-9
D803	E-9
D804	E-11
D805	E-11
D806	F-11
D809	F-11
IC601	B-7
IC602	B-1
IC701	H-11
IC801	F-10
Q701	I-10
Q702	H-12
Q703	G-12
Q801	G-10
Q802	I-10
Q803	F-11

Note:

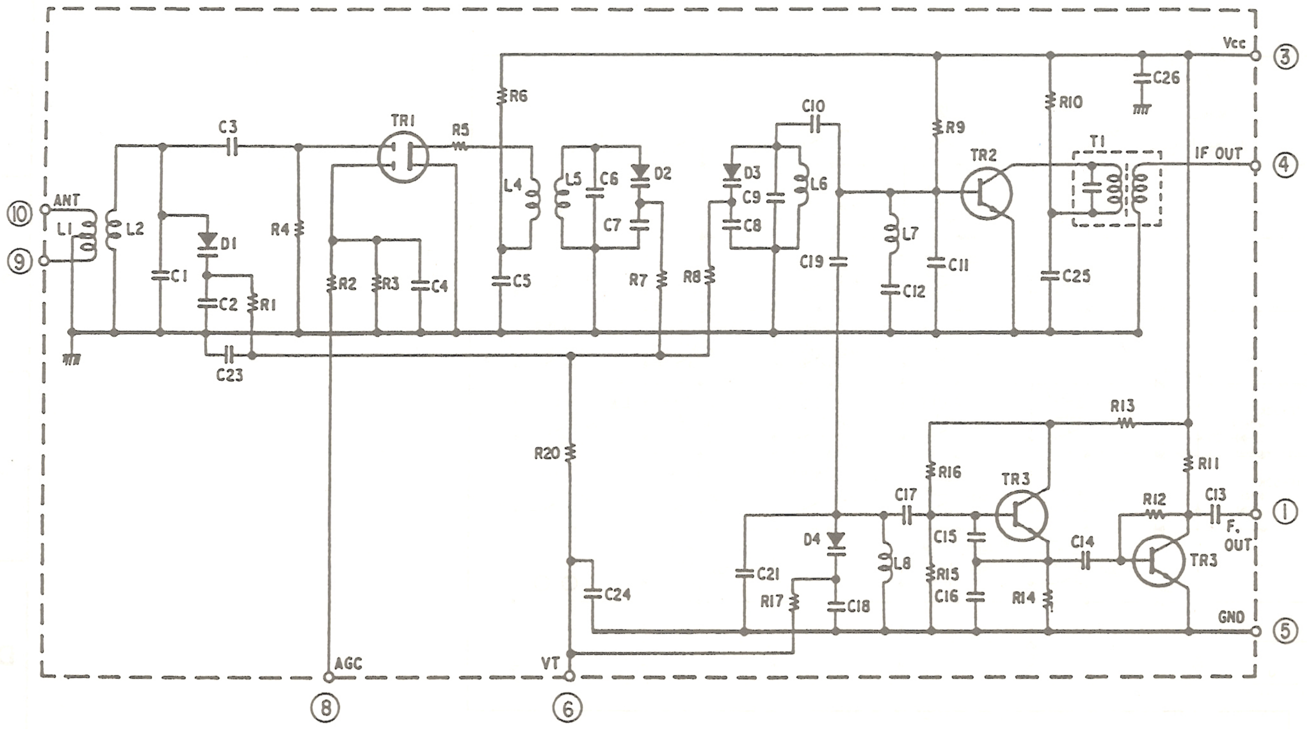
- ○—— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- [ ]- indicates side identified with part number.
- WG: West Germany model
- IT: Italian model

3-6. CONTROL AND POWER SUPPLY SECTION SCHEMATIC DIAGRAM • See page 6 for Notes.

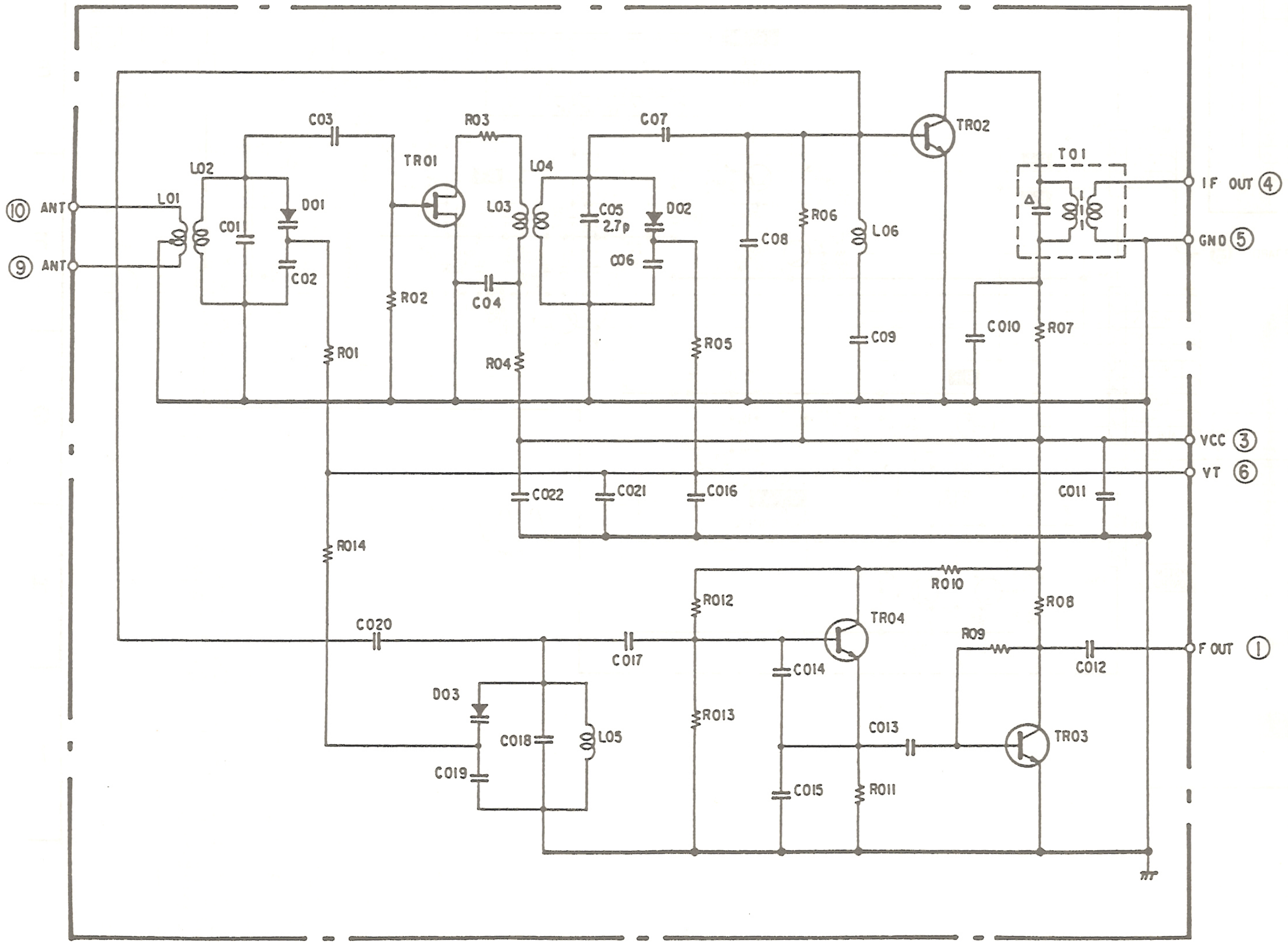

[PANEL BOARD]
FL601 INDICATOR TUBE
ONCE DAILY SLEEP AUTO MUTING TUNED MEMORY
ON OFF STEREO PRESET
KHz MHz
8G 7G 6G 5G 4G 3G 2G 1G
IC601
TMP47C870N-4661 CONTROLLER/FL DRIVE
D602-604, US1060M
D604 D602 D603
L601 100μ
C606 100 6.3V
C605 0.01
C609 10 16V
R623 100 R624 1k
TP602
R622 10k R621 10k R620 10k R619 10k R618 10k R617 10k R616 3.3k R615 10k R614 10k R613 10k R612 10k R611 10k R610 10k R609 10k
VDD VKK
SCK SO SI CE AUB OUT RB1 AUB IN STEREO IN TUNED IN MUTING OUT IF COUNT NG P23 P22 P21 P20
K00 K01 K02 K03 TEST X IN X OUT RESET HOLD RERAY OUT R60 R61 R62 R63 P10 P11 P12 P13 GND
X601 4.1943MHz
D601 US1060M
C601 15p C602 15p C604 0.01 C603 4.7 25V
R601 100k R602 4.7k R603 100k R604 100k R605 10k R606 10k R607 10k R608 10k
C607 22 35V
B+ B−
D605, 609, 610 D612-618 US1060M
IT MODEL D605
D612 D613 D614 D615 D616 D617 D618
IF+50K *D609 IF-50K *D610
S601 1 S602 2 S603 3 S604 4 S605 5
S606 6 S607 7 S608 8 S609 9 S610 0
S611 A S612 SHIFT B S613 C S614 + TUNING − S615
S616 BAND S617 MEMORY S618 MEMORY SCAN S619 AUTO
S620 ONCE S621 DAILY S622 NEXT S623 + TIME − S624
S625 CLOCK S626 SLEEP S627 CONTROL S628 CLEAR S629 BACK
S630 POWER S631 FREQUENCY/TIME S632 MODE
TP601
IC601 ⑲ 3.6V 0.8V 238μsec
IC601 ⑳ 4.3V 0.4V 238μsec
R626 22k R625 10k C608 0.01
IC602 GP1U52 RECEIVER
CN601 VF VF SIRCS OUT GND +5V MUTING −30V AUB IN HOLD AUB OUT RELAY OUT
CN602 STEREO IND TUNED IND GND SI CL SO CE
Ⓐ TO TUNER BOARD Ⓒ
[CONNECTOR BOARD]
CN802 L CH GND R CH CN901
SYSTEM CONTROL 1
TO TUNER BOARD Ⓑ
[POWER BOARD]
IC801 LA5667 POWER CONTROL
IN 13V GND RESET IN 5V OUT 5V MUTE OUT 13V
[IC BOARD]
RY801
C801 0.01 400V
D801 US1060M
R801 220
C802 0.01
PT801 POWER TRANSFORMER
D802 10E2 D803 10E2 D804 10E2
F801 2.5A
CNJ801 CNJ802
SWITCHED 500W MAX AC OUTLET
CN801 CN804 CNP801
CN802 MUTING GND +13V +5V
Q801 2SB1116A B+ SWITCH
R803 4.7k R804 4.7k
R805 1k R806 22k
Q802 2SC2603 RELAY SWITCH
R802 10k R809 47k
C806 47 16V C807 47 16V C805 1000 35V C804 0.01 C803 0.01
C809 0.01 C808 47 50V C812 47 50V C813 10 50V
D806 HZL30L R808 4.7k
C811 47 63V C810 47 63V
R807 150 D805 10E2
Q803 2SB1116A REG
D807 UZB5.6B
CN803 VF VF SIRCS IN GND +5V MUTING −27V AUB IN HOLD AUB OUT RELAY
C703 150p C702 150p
C705 0.01 C704 10 50V L701 100μ C701 0.01
R710 10k R709 10k R708 10k R707 1M
X701 800kHz
Q703 2SC3402 BUFFER
D701 US1060M D702 US1060M
IC701 M50760-141P SIRCS CONTROL
4.8V 0V 1.25μsec
AUB GND CN701
SYSTEM CONTROL 2
R701 4.7k R702 10k R703 10 R706 10 R704 4.7k R705 10k
Q701 2SC2603 Q702 2SC2603 SWITCH

3-7. FM FRONT-END (FE1) SCHEMATIC DIAGRAMS

(West Germany, Italian Model)


Vcc
③
IF OUT
④
⑩
⑨
ANT
L1
L2
C1
C2
D1
R1
C23
C3
TR1
R5
R4
R2
R3
C4
C5
R6
L4
L5
C6
D2
C7
R7
R8
D3
C9
C8
C10
L6
C19
R9
TR2
L7
C11
C12
R10
C26
T1
C25
R20
R13
R11
R16
TR3
C17
R12
C13
F. OUT
①
D4
C15
R15
C16
L8
C14
TR3
C21
R17
C18
R14
C24
GND
⑤
AGC
VT
⑧
⑥

(AEP, UK Model)


⑩ ANT
⑨ ANT
L01
L02
C01
D01
C02
C03
R01
R02
TR01
R03
L03
C04
R04
L04
C05
2.7p
D02
C06
C07
R05
C08
R06
L06
C09
TR02
T01
IF OUT ④
GND ⑤
C010
R07
VCC ③
VT ⑥
C022
C021
C016
C011
R014
C020
C017
R012
R013
TR04
R010
R08
R09
C012
F OUT ①
D03
C018
L05
C019
C014
C013
C015
R011
TR03

SECTION 4
EXPLODED VIEW

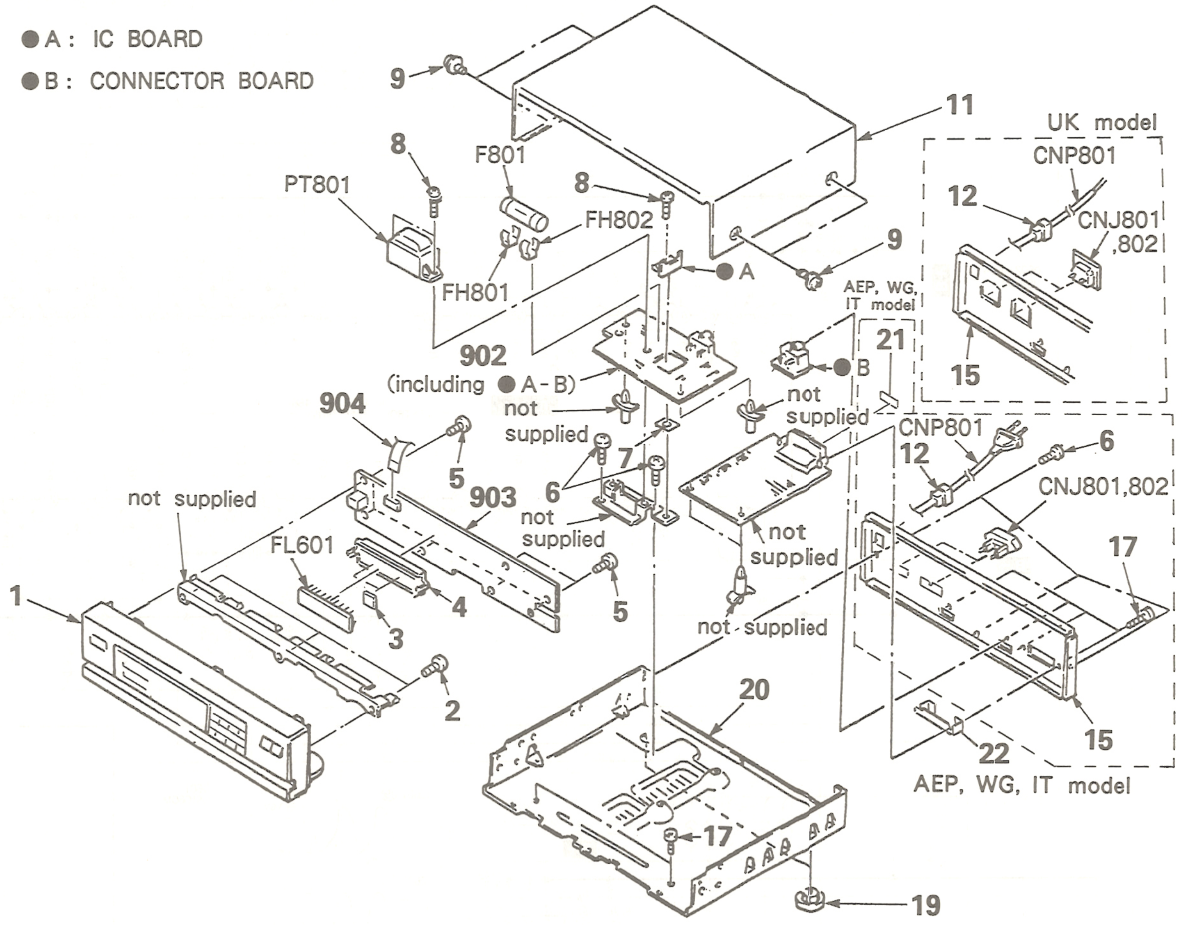
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ Cabinet's Color ↑ Parts Color

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- WG: West Germany model
- IT : Italian model

●A : IC BOARD
●B : CONNECTOR BOARD


9
8
F801
PT801
8
FH802
FH801
●A
9
11
UK model
CNP801
12
CNJ801
,802
AEP, WG, IT model
21
●B
15
902
(including ●A-B)
904
not supplied
not supplied
7
5
903
6
not supplied
not supplied
CNP801
12
6
CNJ801,802
not supplied
FL601
17
1
4
3
5
not supplied
2
20
22
15
AEP, WG, IT model
17
19

No.	Part No.	Description	Remarks
1	X-4917-289-1	PANEL ASSY, FRONT	
2	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
3	*4-921-941-31	CUSHION (FL)	
4	*4-923-103-01	HOLDER, FL TUBE	
5	4-928-635-01	SCREW, +BV (2.6X8) TAPPING	
6	7-682-547-09	SCREW +BVTT 3X6 (S)	
7	*4-937-354-01	SHEET	
8	3-703-249-31	SCREW, S TIGHT, +PTTWH (M3X10)	
9	3-704-366-01	SCREW (CASE) (M3X8)	
11	4-919-389-31	CASE	
12	*3-703-244-00	BUSHING (2104), CORD	
15	*4-934-871-11	(AEP,IT)...PANEL, BACK	
	*4-934-871-21	(UK).......PANEL, BACK	
	*4-934-871-41	(WG).......PANEL, BACK	
17	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
19	4-933-601-01	FOOT	
20	*4-924-520-01	CHASSIS	
21	*4-612-009-01	(WG,IT)...SPACER (A)	
22	*4-924-988-11	PLATE (ST), GROUND	

No.	Part No.	Description	Remarks
902	*A-4334-501-A	(AEP).....MOUNTED PCB, POWER	
	*A-4334-503-A	(WG,IT)...MOUNTED PCB, POWER	
	*A-4334-822-A	(UK)......MOUNTED PCB, POWER	
903	*A-4334-497-A	(AEP)...MOUNTED PCB, PANEL	
	*A-4334-499-A	(WG)....MOUNTED PCB, PANEL	
	*A-4334-500-A	(IT)....MOUNTED PCB, PANEL	
	*A-4334-821-A	(UK)....MOUNTED PCB, PANEL	
904	1-575-666-11	WIRE, FLAT TYPE (11 CORE)	
CNJ801⚠	1-526-751-00	(UK)..........OUTLET, AC	
CNJ801⚠	1-526-794-11	(AEP,WG,IT)...OUTLET, AC	
CNJ802⚠	1-526-751-00	(UK)..........OUTLET, AC	
CNJ802⚠	1-526-794-11	(AEP,WG,IT)...OUTLET, AC	
CNP801⚠	1-575-651-11	(AEP,WG,IT)...CORD, POWER	
CNP801⚠	1-575-652-11	(UK)..........CORD, POWER	
F801 ⚠.	1-532-286-00	FUSE, TIME-LAG (2.5A)	
FH801	1-533-213-31	HOLDER, FUSE	
FH802	1-533-213-31	HOLDER, FUSE	
FL601	1-519-595-11	INDICATOR TUBE, FLUORESCENT	
PT801⚠.	1-449-979-11	TRANSFORMER, POWER	

SECTION 5
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA...,
UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- WG: West Germany model
- IT : Italian model

TUNER SECTION

Ref.No.	Part No.	Description
C1	1-162-294-31	CERAMIC CHIP 0.001MF 20% 25V
C2	1-126-101-11	ELECT 100MF 20% 16V
C3	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C4	1-162-294-31	CERAMIC CHIP 0.001MF 20% 25V
C5	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C6	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C7	1-163-059-00	(WG,IT)...CERAMIC MELF 0.01MF 20% 16V
C8	1-163-059-00	(WG,IT)...CERAMIC MELF 0.01MF 20% 16V
C9	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C11	1-101-005-00	(WG,IT)...CERAMIC 0.022MF 50V
C21	1-101-006-00	CERAMIC 0.047MF 50V
C22	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C23	1-124-477-11	ELECT 47MF 20% 16V
C24	1-123-382-00	ELECT 3.3MF 20% 50V
C25	1-163-063-00	CERAMIC MELF 0.022MF 25V
C26	1-163-019-00	CERAMIC CHIP 0.0068 20% 12V
C27	1-162-516-11	(AEP,UK)..CERAMIC CHIP 100PF 10% 50V
C27	1-163-007-11	(WG,IT)...CERAMIC CHIP 680PF 20% 50V
C28	1-124-791-11	ELECT 1.0MF 20% 50V
C29	1-162-516-11	(WG,IT)...CERAMIC CHIP 100PF 10% 50V
C30	1-124-791-11	ELECT 1.0MF 20% 50V
C31	1-124-902-00	ELECT 0.47MF 20% 50V
C32	1-124-463-00	ELECT 0.1MF 20% 50V
C33	1-130-481-00	FILM 0.0068MF 5% 50V
C34	1-123-382-00	ELECT 3.3MF 20% 50V
C35	1-130-481-00	FILM 0.0068MF 5% 50V
C36	1-123-382-00	ELECT 3.3MF 20% 50V
C37	1-123-875-11	ELECT 10MF 20% 50V
C39	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C40	1-124-463-00	ELECT 0.1MF 20% 50V
C41	1-124-927-11	ELECT 4.7MF 20% 50V
C42	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C43	1-126-176-11	ELECT 220MF 20% 10V
C44	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C45	1-123-382-00	ELECT 3.3MF 20% 50V
C46	1-161-375-00	CERAMIC CHIP 0.0022MF 20% 25V
C47	1-163-170-00	(WG,IT)...CERAMIC CHIP 0.0047MF 20% 25V
C48	1-123-382-00	ELECT 3.3MF 20% 50V
C49	1-161-375-00	CERAMIC CHIP 0.0022MF 20% 25V
C50	1-163-170-00	(WG,IT)...CERAMIC CHIP 0.0047MF 20% 25V
C51	1-124-477-11	ELECT 47MF 20% 16V
C53	1-163-105-00	CERAMIC CHIP 33PF 5% 50V
C54	1-101-005-00	(WG,IT)...CERAMIC 0.022MF 50V
C61	1-163-063-00	CERAMIC MELF 0.022MF 25V
C62	1-163-063-00	CERAMIC MELF 0.022MF 25V
C63	1-163-063-00	CERAMIC MELF 0.022MF 25V
C64	1-163-063-00	CERAMIC MELF 0.022MF 25V
C65	1-163-063-00	CERAMIC MELF 0.022MF 25V
C66	1-163-063-00	CERAMIC MELF 0.022MF 25V

Ref.No.	Part No.	Description
C67	1-102-120-00	CERAMIC 0.0018MF 10% 50V
C68	1-163-111-11	CERAMIC CHIP 0.0015MF 20% 25V
C69	1-163-063-00	CERAMIC MELF 0.022MF 25V
C70	1-163-063-00	CERAMIC MELF 0.022MF 25V
C71	1-163-063-00	CERAMIC MELF 0.022MF 25V
C72	1-163-063-00	CERAMIC MELF 0.022MF 25V
C73	1-163-063-00	CERAMIC MELF 0.022MF 25V
C81	1-102-961-00	CERAMIC 27PF 5% 50V
C82	1-102-961-00	CERAMIC 27PF 5% 50V
C83	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C84	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C85	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C86	1-124-477-11	ELECT 47MF 20% 16V
C87	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C88	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C101	1-124-925-11	ELECT 2.2MF 20% 50V
C102	1-124-463-00	ELECT 0.1MF 20% 50V
C103	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C104	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C105	1-124-477-11	ELECT 47MF 20% 16V
C106	1-136-173-00	MYLAR 0.47MF 5% 50V
C107	1-124-463-00	ELECT 0.1MF 20% 50V
C108	1-163-063-00	(WG,IT)...CERAMIC MELF 0.022MF 25V
CF1	1-567-389-11	FILTER, CERAMIC
CF2	1-567-389-11	FILTER, CERAMIC
CF3	1-567-389-11	(WG,IT)....FILTER, CERAMIC
CF21	1-577-075-11	OSCILLATOR, CERAMIC (19kHz)
CFT21	1-404-853-11	TRANSFORMER, IF (CERAMIC FILTER)
CNJ1	*1-568-273-11	SOCKET, CONNECTOR 7P
CNJ3	*1-568-308-11	SOCKET, CONNECTOR 4P
CNJ4	1-568-269-11	SOCKET, CONNECTOR 3P
D61	8-719-912-20	DIODE 1SS120
FE1	1-463-857-11	(WG,IT)....FRONT END (FM)
FE1	1-463-862-21	(AEP,UK)...FRONT END (FM)
FE61	1-236-462-11	ENCAPSULATED COMPONENT (MW RF BLOCK)
FE62	1-236-463-11	ENCAPSULATED COMPONENT (LW RF BLOCK)
IC21	8-759-821-45	IC LA1851N
IC81	8-759-820-91	IC LC7218
L1	1-410-645-31	MICRO INDUCTOR 100UH
L2	1-410-645-31	(WG,IT)...MICRO INDUCTOR 100UH
L21	1-407-500-00	MICRO INDUCTOR 4.7UH
L61	1-410-525-11	MICRO INDUCTOR 220UH
LPF21	1-235-164-00	FILTER, LOW PASS
LPF22	1-235-164-00	FILTER, LOW PASS

TUNER SECTION

Ref.No.	Part No.	Description
Q1	8-729-230-99	TRANSISTOR 2SC2669-OY
Q2	8-729-230-99	TRANSISTOR 2SC2669-OY
Q3	8-729-230-99	(WG,IT)...TRANSISTOR 2SC2669-OY
Q4	8-729-230-99	(WG,IT)...TRANSISTOR 2SC2669-OY
Q21	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q22	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q23	8-729-900-61	TRANSISTOR DTA114ES
Q24	8-729-900-80	TRANSISTOR DTC114ES
Q26	8-729-900-80	TRANSISTOR DTC114ES
Q61	8-729-900-80	TRANSISTOR DTC114ES
Q62	8-729-900-80	TRANSISTOR DTC114ES
Q63	8-729-900-80	TRANSISTOR DTC114ES
Q64	8-729-820-24	TRANSISTOR 2SC3330-T
Q65	8-729-821-04	TRANSISTOR 2SA1317-STU
Q66	8-729-900-80	TRANSISTOR DTC114ES
Q81	8-729-900-61	TRANSISTOR DTA114ES
Q82	8-729-900-80	TRANSISTOR DTC114ES
Q83	8-729-202-67	TRANSISTOR 2SK246-GR3
Q84	8-729-107-84	TRANSISTOR 2SC3113A
Q85	8-729-202-67	TRANSISTOR 2SK246-GR3
Q86	8-729-107-84	TRANSISTOR 2SC3113A
R1	⚠.1-249-397-11	(WG,IT)....CARBON (SMALL)22 5% 1/4W F
R1	⚠.1-249-401-11	(AEP,UK)...CARBON (SMALL)47 5% 1/4W F
R3	1-249-329-11	CARBON MELF 330 5% 1/8W
R4	1-249-329-11	CARBON MELF 330 5% 1/8W
R5	1-249-329-11	CARBON MELF 330 5% 1/8W
R6	1-249-350-11	CARBON MELF 18K 5% 1/8W
R7	1-249-329-11	CARBON MELF 330 5% 1/8W
R8	1-249-332-11	CARBON MELF 560 5% 1/8W
R9	1-249-352-11	CARBON MELF 27K 5% 1/8W
R10	1-249-329-11	(WG,IT)...CARBON MELF 330 5% 1/8W
R11	1-249-350-11	(WG,IT)...CARBON MELF 18K 5% 1/8W
R12	1-249-329-11	(WG,IT)...CARBON MELF 330 5% 1/8W
R13	1-249-334-11	(WG,IT)...CARBON MELF 820 5% 1/8W
R14	1-249-352-11	(WG,IT)...CARBON MELF 27K 5% 1/8W
R15	1-249-347-11	(WG,IT)...CARBON MELF 10K 5% 1/8W
R16	1-249-343-11	(WG,IT)...CARBON MELF 4.7K 5% 1/8W
R21	⚠.1-249-404-00	CARBON (SMALL)82 5% 1/4W F
R22	⚠.1-249-430-11	CARBON (SMALL)12K 5% 1/4W F
R23	1-249-335-11	CARBON MELF 1K 5% 1/8W
R24	1-249-353-11	CARBON MELF 33K 5% 1/8W
R25	1-249-346-11	CARBON MELF 8.2K 5% 1/8W
R26	1-249-340-11	(WG,IT)...CARBON MELF 2.7K 5% 1/8W
R27	⚠.1-249-432-11	CARBON (SMALL)18K 5% 1/4W F
R29	1-249-347-11	CARBON MELF 10K 5% 1/8W
R31	1-249-331-11	CARBON MELF 470 5% 1/8W
R32	1-249-347-11	CARBON MELF 10K 5% 1/8W
R33	1-249-347-11	CARBON MELF 10K 5% 1/8W
R34	⚠.1-249-437-11	CARBON (SMALL)47K 5% 1/4W F
R35	1-249-355-11	CARBON MELF 47K 5% 1/8W
R37	1-249-359-11	CARBON MELF 100K 5% 1/8W
R38	1-249-363-11	CARBON MELF 220K 5% 1/8W
R39	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R40	1-249-338-11	CARBON MELF 1.8K 5% 1/8W
R41	1-249-344-11	CARBON MELF 5.6K 5% 1/8W
R42	1-249-359-11	CARBON MELF 100K 5% 1/8W
R43	1-249-363-11	CARBON MELF 220K 5% 1/8W
R44	1-249-339-11	CARBON MELF 2.2K 5% 1/8W

Ref.No.	Part No.	Description
R45	1-249-338-11	CARBON MELF 1.8K 5% 1/8W
R46	1-249-344-11	CARBON MELF 5.6K 5% 1/8W
R47	⚠.1-249-409-11	CARBON (SMALL)220 5% 1/4W F
R61	1-249-359-11	CARBON MELF 100K 5% 1/8W
R62	1-249-355-11	CARBON MELF 47K 5% 1/8W
R64	1-249-351-11	CARBON MELF 22K 5% 1/8W
R65	1-249-355-11	CARBON MELF 47K 5% 1/8W
R66	1-215-493-00	CARBON MELF 1M 5% 1/5W
R67	1-249-359-11	CARBON MELF 100K 5% 1/8W
R68	1-249-352-11	CARBON MELF 27K 5% 1/8W
R69	1-249-351-11	CARBON MELF 22K 5% 1/8W
R70	1-249-331-11	CARBON MELF 470 5% 1/8W
R71	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R72	1-249-351-11	CARBON MELF 22K 5% 1/8W
R73	1-249-347-11	CARBON MELF 10K 5% 1/8W
R74	1-249-347-11	CARBON MELF 10K 5% 1/8W
R75	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R81	1-249-335-11	CARBON MELF 1K 5% 1/8W
R82	1-249-335-11	CARBON MELF 1K 5% 1/8W
R83	1-249-335-11	CARBON MELF 1K 5% 1/8W
R84	1-249-335-11	CARBON MELF 1K 5% 1/8W
R85	1-249-347-11	CARBON MELF 10K 5% 1/8W
R86	1-249-335-11	CARBON MELF 1K 5% 1/8W
R87	1-249-347-11	CARBON MELF 10K 5% 1/8W
R88	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R89	1-249-335-11	CARBON MELF 1K 5% 1/8W
R90	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R91	1-249-335-11	CARBON MELF 1K 5% 1/8W
R92	⚠.1-249-401-11	CARBON (SMALL)47 5% 1/4W F
R101	1-249-341-11	CARBON MELF 3.3K 5% 1/8W
R102	1-249-332-11	CARBON MELF 560 5% 1/8W
R103	1-249-335-11	CARBON MELF 1K 5% 1/8W
R104	1-249-328-11	CARBON MELF 270 5% 1/8W
R105	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R106	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R107	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R108	1-249-323-11	CARBON MELF 100 5% 1/8W
R109	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R110	⚠.1-249-405-11	CARBON (SMALL)100 5% 1/4W F
R111	1-249-341-11	CARBON MELF 3.3K 5% 1/8W
R112	1-249-332-11	CARBON MELF 560 5% 1/8W
R113	1-249-335-11	CARBON MELF 1K 5% 1/8W
R114	1-249-328-11	CARBON MELF 270 5% 1/8W
R115	1-249-351-11	CARBON MELF 22K 5% 1/8W
R116	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R117	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R118	1-249-323-11	CARBON MELF 100 5% 1/8W
RV21	1-238-013-11	(AEP,UK)...RES, ADJ, CARBON 2.2K
RV21	1-238-015-11	(WG,IT)....RES, ADJ, CARBON 4.7K
RV22	1-238-017-11	RES, ADJ, CARBON 22K
RV24	1-238-017-11	(AEP,UK)...RES, ADJ, CARBON 22K
RV24	1-238-019-11	(WG,IT)....RES, ADJ, CARBON 47K
T21	1-404-807-11	TRANSFORMER, DISCRIMINATOR
T23	1-236-465-11	(WG,IT)...ENCAPSULATED COMPONENT
TM1	*1-537-138-31	TERMINAL BOARD (ANT)(ANTENNA)
TP1	*1-560-060-00	PIN, CONNECTOR 2P
XT81	1-577-126-11	VIBRATOR, CRYSTAL (7.2MHz)

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

EXCEPT TUNER SECTION

Ref.No.	Part No.	Description			
902	*A-4334-501-A	(AEP).....MOUNTED PCB, POWER			
	*A-4334-503-A	(WG,IT)...MOUNTED PCB, POWER			
	*A-4334-822-A	(UK)......MOUNTED PCB, POWER			
903	*A-4334-497-A	(AEP)...MOUNTED PCB, PANEL			
	*A-4334-499-A	(WG)....MOUNTED PCB, PANEL			
	*A-4334-500-A	(IT)....MOUNTED PCB, PANEL			
	*A-4334-821-A	(UK)....MOUNTED PCB, PANEL			
904	1-575-666-11	WIRE, FLAT TYPE (11 CORE)			
C601	1-162-200-31	CERAMIC	11PF	5%	50V
C602	1-162-200-31	CERAMIC	11PF	5%	50V
C603	1-126-094-11	ELECT	4.7MF	20%	25V
C604	1-161-379-00	CERAMIC	0.01MF	30%	16V
C605	1-161-379-00	CERAMIC	0.01MF	30%	16V
C606	1-126-177-11	ELECT	100MF	20%	6.3V
C607	1-123-357-00	ELECT	22MF	20%	35V
C608	1-161-379-00	CERAMIC	0.01MF	30%	16V
C609	1-126-157-11	ELECT	10MF	20%	16V
C701	1-161-379-00	CERAMIC	0.01MF	30%	16V
C702	1-162-284-31	CERAMIC	150PF	10%	50V
C703	1-162-284-31	CERAMIC	150PF	10%	50V
C704	1-123-875-11	ELECT	10MF	20%	50V
C705	1-161-379-00	CERAMIC	0.01MF	30%	16V
C801	1-161-744-00	CERAMIC	0.01MF		400V
C802	1-101-004-00	CERAMIC	0.01MF		50V
C803	1-101-004-00	CERAMIC	0.01MF		50V
C804	1-126-105-11	ELECT	1000MF	20%	35V
C805	1-161-379-00	CERAMIC	0.01MF	30%	16V
C806	1-124-477-11	ELECT	47MF	20%	16V
C807	1-124-477-11	ELECT	47MF	20%	16V
C808	1-124-927-11	ELECT	4.7MF	20%	50V
C809	1-161-379-00	CERAMIC	0.01MF	30%	16V
C810	1-124-918-11	ELECT	47MF	20%	63V
C811	1-124-918-11	ELECT	47MF	20%	63V
C812	1-124-910-11	ELECT	47MF	20%	50V
C813	1-123-875-11	ELECT	10MF	20%	50V
CN601	*1-568-854-11	SOCKET, CONNECTOR 11P			
CN602	*1-568-273-11	SOCKET, CONNECTOR 7P			
CN701	*1-569-625-11	SOCKET, CONNECTOR 3P(SYSTEM CONTROL 2)			
CN801	1-535-139-00	BASE POST 22MM (10MM PITCH) 2P			
CN802	*1-568-308-11	SOCKET, CONNECTOR 4P			
CN803	*1-568-830-11	SOCKET, CONNECTOR 11P			
CN804	*1-564-321-00	PIN, CONNECTOR 2P			
CN901	*1-569-625-11	SOCKET, CONNECTOR 3P(SYSTEM CONTROL 1)			
CN902	1-568-269-11	SOCKET, CONNECTOR 3P			

Ref.No.	Part No.	Description	
CNJ801⚠	1-526-751-00	(UK)..........OUTLET, AC	
CNJ801⚠	1-526-794-11	(AEP,WG,IT)...OUTLET, AC	
CNJ802⚠	1-526-751-00	(UK)..........OUTLET, AC	
CNJ802⚠	1-526-794-11	(AEP,WG,IT)...OUTLET, AC	
CNP801⚠	1-575-651-11	(AEP,WG,IT)...CORD, POWER	
CNP801⚠	1-575-652-11	(UK)..........CORD, POWER	
D601	8-719-912-20	DIODE 1SS120	
D602	8-719-912-20	DIODE 1SS120	
D603	8-719-912-20	DIODE 1SS120	
D604	8-719-912-20	DIODE 1SS120	
D605	8-719-912-20	(IT)...DIODE 1SS120	
D609	8-719-912-20	DIODE 1SS120	
D612	8-719-912-20	DIODE 1SS120	
D613	8-719-912-20	DIODE 1SS120	
D614	8-719-912-20	DIODE 1SS120	
D615	8-719-912-20	DIODE 1SS120	
D616	8-719-912-20	DIODE 1SS120	
D617	8-719-912-20	DIODE 1SS120	
D618	8-719-912-20	DIODE 1SS120	
D701	8-719-912-20	DIODE 1SS120	
D702	8-719-912-20	DIODE 1SS120	
D801	8-719-912-20	DIODE 1SS120	
D802	8-719-200-77	DIODE 10E2N	
D803	8-719-200-77	DIODE 10E2N	
D804	8-719-200-77	DIODE 10E2N	
D805	8-719-200-77	DIODE 10E2N	
D806	8-719-934-22	DIODE HZS30-2L	
D807	8-719-014-66	DIODE UZP-5.6B	
F801 ⚠.	1-532-286-00	FUSE, TIME-LAG (2.5A)	
FH801	1-533-213-31	HOLDER, FUSE	
FH802	1-533-213-31	HOLDER, FUSE	
FL601	1-519-595-11	INDICATOR TUBE, FLUORESCENT	
IC601	8-759-239-54	IC TMP47C870N-4661	
IC602	8-749-920-83	IC GP1U52XB	
IC701	8-759-634-73	IC M50760-141P	
IC801	8-759-820-09	IC LA5667	
L601	1-410-521-11	INDUCTOR	100UH
L701	1-410-521-11	INDUCTOR	100UH
PT801⚠.	1-449-979-11	TRANSFORMER, POWER	
Q701	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q702	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q703	8-729-900-80	TRANSISTOR DTC114ES	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

EXCEPT TUNER SECTION

Ref.No.	Part No.	Description			
Q801	8-729-140-04	TRANSISTOR 2SB1116A-L			
Q802	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q803	8-729-140-04	TRANSISTOR 2SB1116A-L			
R601	1-249-441-11	CARBON	100K	5%	1/4W
R602	1-249-425-11	CARBON	4.7K	5%	1/4W
R603	1-249-441-11	CARBON	100K	5%	1/4W
R604	1-249-441-11	CARBON	100K	5%	1/4W
R605	1-249-429-11	CARBON	10K	5%	1/4W
R606	1-249-429-11	CARBON	10K	5%	1/4W
R607	1-249-429-11	CARBON	10K	5%	1/4W
R608	1-249-429-11	CARBON	10K	5%	1/4W
R609	1-249-429-11	CARBON	10K	5%	1/4W
R610	1-249-429-11	CARBON	10K	5%	1/4W
R611	1-249-429-11	CARBON	10K	5%	1/4W
R612	1-249-429-11	CARBON	10K	5%	1/4W
R613	1-249-429-11	CARBON	10K	5%	1/4W
R614	1-249-429-11	CARBON	10K	5%	1/4W
R615	1-249-429-11	CARBON	10K	5%	1/4W
R616	1-249-423-11	CARBON	3.3K	5%	1/4W
R617	1-249-429-11	CARBON	10K	5%	1/4W
R618	1-249-429-11	CARBON	10K	5%	1/4W
R619	1-249-429-11	CARBON	10K	5%	1/4W
R620	1-249-429-11	CARBON	10K	5%	1/4W
R621	1-249-429-11	CARBON	10K	5%	1/4W
R622	1-249-429-11	CARBON	10K	5%	1/4W
R623	1-249-405-11	CARBON	100	5%	1/4W
R624	1-249-417-11	CARBON	1K	5%	1/4W
R625	1-249-429-11	CARBON	10K	5%	1/4W
R626	1-249-433-11	CARBON	22K	5%	1/4W
R701	1-249-425-11	CARBON	4.7K	5%	1/4W
R702	1-249-429-11	CARBON	10K	5%	1/4W
R703	1-249-393-11	CARBON	10	5%	1/4W
R704	1-249-425-11	CARBON	4.7K	5%	1/4W
R705	1-249-429-11	CARBON	10K	5%	1/4W
R706	1-249-393-11	CARBON	10	5%	1/4W
R707	1-247-903-00	CARBON	1M	5%	1/4W
R708	1-249-429-11	CARBON	10K	5%	1/4W
R709	1-249-429-11	CARBON	10K	5%	1/4W
R710	1-249-429-11	CARBON	10K	5%	1/4W
R801	1-247-743-11	CARBON	220	5%	1/2W
R802	1-249-429-11	CARBON	10K	5%	1/4W
R803	1-249-425-11	CARBON	4.7K	5%	1/4W
R804	1-249-425-11	CARBON	4.7K	5%	1/4W
R805	1-249-417-11	CARBON	1K	5%	1/4W
R806	1-249-433-11	CARBON	22K	5%	1/4W

Ref.No.	Part No.	Description				
R807 ⚠	1-247-702-11	CARBON	150	5%	1/4W	F
R808	1-249-425-11	CARBON	4.7K	5%	1/4W	
R809	1-249-437-11	CARBON	47K	5%	1/4W	
RY801	1-515-720-11	RELAY				
S601	1-554-303-21	SWITCH, KEY BOARD (1)				
S602	1-554-303-21	SWITCH, KEY BOARD (2)				
S603	1-554-303-21	SWITCH, KEY BOARD (3)				
S604	1-554-303-21	SWITCH, KEY BOARD (4)				
S605	1-554-303-21	SWITCH, KEY BOARD (5)				
S606	1-554-303-21	SWITCH, KEY BOARD (6)				
S607	1-554-303-21	SWITCH, KEY BOARD (7)				
S608	1-554-303-21	SWITCH, KEY BOARD (8)				
S609	1-554-303-21	SWITCH, KEY BOARD (9)				
S610	1-554-303-21	SWITCH, KEY BOARD (10)				
S611	1-554-303-21	SWITCH, KEY BOARD (A.SHIFT)				
S612	1-554-303-21	SWITCH, KEY BOARD (B.SHIFT)				
S613	1-554-303-21	SWITCH, KEY BOARD (C.SHIFT)				
S614	1-554-303-21	SWITCH, KEY BOARD (+.TUNING)				
S615	1-554-303-21	SWITCH, KEY BOARD (-.TUNING)				
S616	1-554-303-21	SWITCH, KEY BOARD (BAND)				
S617	1-554-303-21	SWITCH, KEY BOARD (MEMORY)				
S618	1-554-303-21	SWITCH, KEY BOARD (MEMORY SCAN)				
S619	1-554-303-21	SWITCH, KEY BOARD (AUTO)				
S620	1-554-303-21	SWITCH, KEY BOARD (ONECE)				
S621	1-554-303-21	SWITCH, KEY BOARD (DAILY)				
S622	1-554-303-21	SWITCH, KEY BOARD (NEXT)				
S623	1-554-303-21	SWITCH, KEY BOARD (+.TIME)				
S624	1-554-303-21	SWITCH, KEY BOARD (-.TIME)				
S625	1-554-303-21	SWITCH, KEY BOARD (CLOSE)				
S626	1-554-303-21	SWITCH, KEY BOARD (SPEEP)				
S627	1-554-303-21	SWITCH, KEY BOARD (CONTROL)				
S628	1-554-303-21	SWITCH, KEY BOARD (CLEAR)				
S629	1-554-303-21	SWITCH, KEY BOARD (BACK)				
S630	1-554-303-21	SWITCH, KEY BOARD (POWER)				
S631	1-554-303-21	SWITCH, KEY BOARD (FREQUENCY/TIME)				
S632	1-554-303-21	SWITCH, KEY BOARD (MODE)				
X601	1-567-821-21	VIBRATOR, CRYSTAL (4.194304MHz)				
X701	1-578-699-11	OSCILLATOR, CERAMIC (800kHz)				

ACCESSORY & PACKING MATERIAL

4-920-940-01	SHEET (A), PROTECTION
*4-934-860-01	CUSHION

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

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DXA-V502

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model

SONY
COMPACT HI-FI COMPONENT SYSTEM LBT-V502
AUTO REVERSE
AUTO REVERSE

DXA-V502 is the deck amplifier section in LBT-V502/V502CD/V502CDM.

Model Name Using Similar Mechanism	HST-D501	
Tape Transport Mechanism Type	DECK A	TCM-170A1
	DECK B	TCM-170B1

SPECIFICATIONS

Amplifier

Continuous RMS power output
60 W + 60 W (6 ohms, at 1 kHz, 0.7% THD)
Music power output 100 W + 100 W (6 ohms, at 1 kHz, 10% THD)

Input	Jack type	Sensitivity	Impedance
PHONO IN	Phono	2 mV	47 kohms
VIDEO/DAT IN	Phono	200 mV	47 kohms
CD IN	Phono	200 mV	47 kohms

Output	Jack type	Impedance
SURROUND SPEAKER	Phono	Accepts speakers of 8 to 16 ohms
HEAD-PHONES	Stereophone	Accepts headphones of 8 ohms or more

Frequency response	CD: 15 Hz to 50 kHz $\pm^{0}_{3}$ dB

Cassette deck

Recording system	4-track 2-channel stereo
Frequency response	DOLBY NR OFF With Type II cassette (Sony UX-S) 40 Hz to 14 kHz (±3 dB) With Type I cassette (Sony HF-S) 40 Hz to 13 kHz (±3 dB)
Wow and flutter	0.1% (WRMS)

General

Power requirements

AEP, Italian Models :	220V AC, 50Hz
UK Model :	240V AC, 50Hz
E, Saudi Arabia, Australian Models:	110, 120, 220, 240V AC, 50/60Hz

Power consumption	230W
Weight	Approx. 8 kg
Dimensions	Approx. 355 × 288 × 319 mm (w/h/d, including projections)

Design and specifications subject to change without notice.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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MICROFILM

STEREO CASSETTE DECK AMPLIFIER

SONY®

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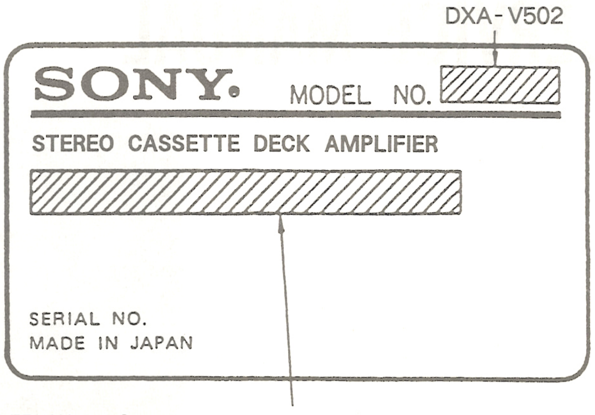
MODEL IDENTIFICATION

– Specification Labels –



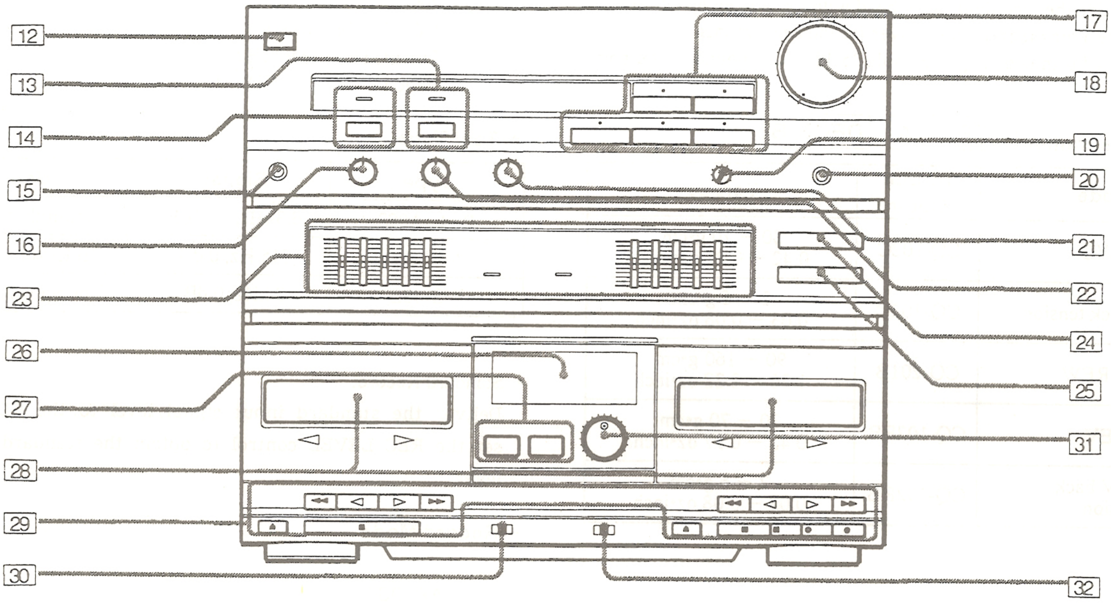
AEP, West Germany, Italian Models : AC:220V~50/60Hz
UK Model : AC:240V~50/60Hz
E, Saudi Arabia, Australian Models : AC:110/120/220/240V~50/60Hz
150W

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
GENERAL

LOCATION AND FUNCTION OF PARTS AND CONTROLS



Amplifier

12 POWER switch
13 SURROUND switch and indicator
14 DBFB (SAT*) switch and indicator
15 HEADPHONES jack
16 DBFB (SAT*) LEVEL control
17 Function selectors and indicators
18 VOLUME control
19 MIC (microphone) LEVEL control
20 MIC (microphone) jack
21 BALANCE control
22 SURROUND LEVEL control

Equalizer

23 GRAPHIC EQUALIZER controls and indicators
24 SOUND EFFECT switch
25 EFFECT REC switch

Cassette deck

26 Display
27 SYNCHRO DUBBING buttons
28 Cassette holders
29 Tape operation buttons
- ◀◀: Leftward fast winding
- ▶▶: Rightward fast winding
- ◀: Reverse play
- ▶: Forward play
- ⏏: Ejection
- ■: Stop
- ❚❚: Pause (deck B only)
- ○: recording muting (deck B only)
- ●: recording (deck B only)

30 DIRECTION mode switch
31 REC LEVEL control
32 DOLBY NR (noise reduction) switch

* E, Saudi Arabia, Australian model

SECTION 2
ADJUSTMENTS

2-1. MECHANICAL ADJUSTMENTS

PRECAUTIONS

1. Clean the following parts with a denatured-alcoholmoistened swab:

Record/playback head	pinch roller
erase head	rubber belts
capstan	idlers

2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.

Torque Measurement **DECK A** **DECK B**

Mode	Torque Motor	Torque
FWD	CQ-102C	30 – 70 g•cm 0.42 – 0.97 oz•inch
FWD back tension	CQ-102C	2 – 6 g•cm 0.03 – 0.08 oz•inch
FF, REW	CQ-201B	90 – 160 g•cm 1.26 – 2.22 oz•inch
REV	CQ-102RB	30 – 70 g•cm 0.42 – 0.97 oz•inch
REV back tension	CQ-102RB	2 – 6 g•cm 0.03 – 0.08 oz•inch

2-2. ELECTRICAL ADJUSTMENTS

PRECAUTIONS

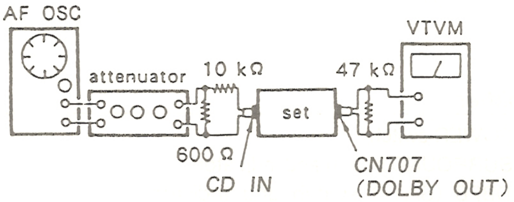
1. The adjusment should be performed in the order given in this service manual.
   The adjustments should be performed for both L-CH and R-CH.
2. Switches and controls should be set as follows unless otherwise specified.
   DOLBY NR switch: OFF
   DIRECTION MODE switch: ⇄
   Function selector: CD

- **Test Tape**

Type	Signal	User for
P-4-A063	6.3kHz, – 10dB	Azimuth Adjustment
P-4-L300	315 Hz, 0 dB	PB Level Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment

- Standard Record:
  Deliver the standard input signal level to the CD IN jack and set the REC LEVEL control to obtain the standard output signal level.

– Record Mode –



- **Standard Input Level**

input terminal	CD IN
source impedance	10 kΩ
input level	61.6mV (-22dB)

- **Standard Output Level**

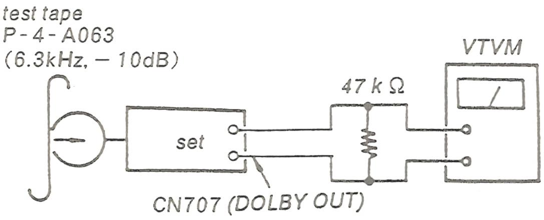
output terminal	CN707 (DOLBY OUT)
load impedance	47 kΩ
output level	56.8mV (-22.7dB)

Record/Playback Head Azimuth Adjsutment

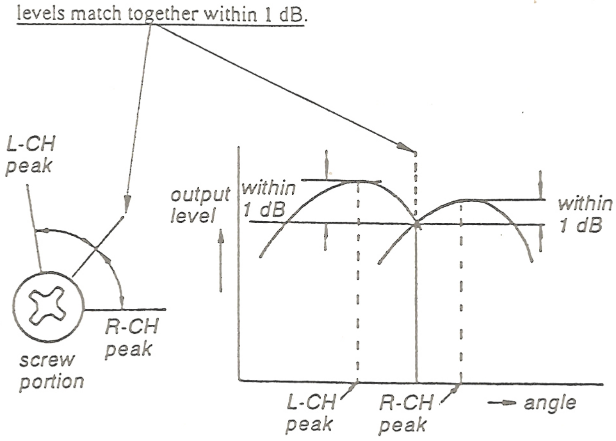
DECK A DECK B

Procedure:

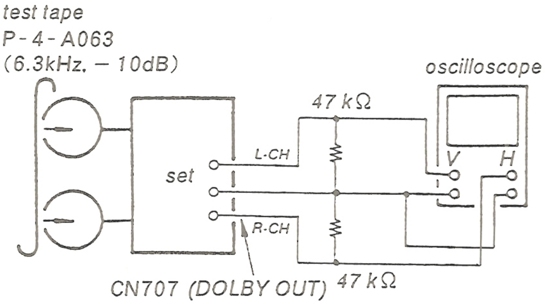
1. Mode: Playback

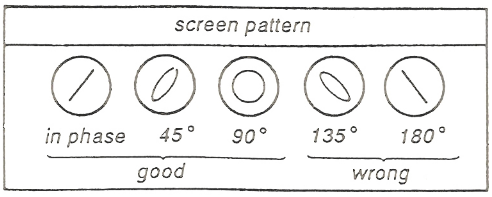

test tape
P-4-A063
(6.3kHz, – 10dB)
VTVM
47 k Ω
set
CN707 (DOLBY OUT)

2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1 dB.


L-CH
peak
R-CH
peak
screw
portion
output
level
within
1 dB
within
1 dB
L-CH
peak
R-CH
peak
angle

3. Phase Check
   Mode: playback

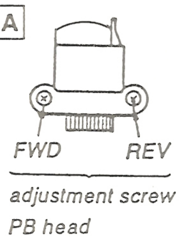

test tape
P-4-A063
(6.3kHz, – 10dB)
oscilloscope
47 kΩ
set
L-CH
R-CH
V
H
CN707 (DOLBY OUT)
47 kΩ


screen pattern
in phase
45°
90°
135°
180°
good
wrong

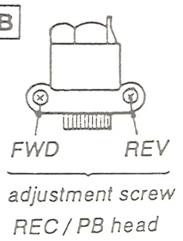
4. Repeat steps 1 – 3 in REV playback mode.
5. After the adjsutment, lock the screws with locking compound.

Adjsutment Location:

DECK A


FWD
REV
adjustment screw
PB head

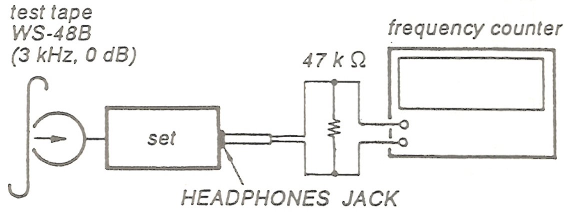
DECK B


FWD
REV
adjustment screw
REC / PB head

Tape Speed Adjustment DECK A DECK B

Procedure:

Mode: playback


test tape
WS-48B
(3 kHz, 0 dB)
frequency counter
47 k Ω
set
HEADPHONES JACK

[Hight speed adjustment]

1. Short CN707 (TEST) on main board .
2. Put the set to FWD playback state.
3. Press and keep on pressing HIGH SPEED DUBBING button.
4. On this time, adjust with the semi-fixed variable resistors (H) on the rear side of M1 (Deck A) and M2 (Deck B) so that the frequency counter reads 5,960 ± 60Hz.
5. After adjustment, release the short on CN707 (TEST).

[Normal speed adjustment]

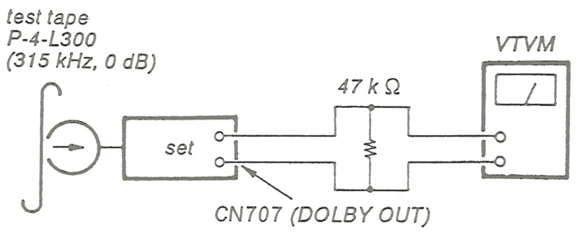
1. Put the set to FWD playback state.
2. On this time, adjust with the semi-fixed variable resistors (N) on the rear side of M1 (Deck A) and M2 (DECK B) so that the frequency counter read 2,980 ± 30Hz.

Adjustment Location : M1/M2

Playback Level Adjustment DECK A DECK B

Procedure:

Mode: FWD playback


test tape
P-4-L300
(315 kHz, 0 dB)
VTVM
47 k Ω
set
CN707 (DOLBY OUT)

Adjust Deck A: RV41A (L-CH), RV61A (R-CH) and Deck B: RV41B (L-CH), RV61B (R-CH) so that the VTVM reading becomes the adjustment limits below.

Adjustment Limits:

DOLBY OUT level : − 2.7 ± 2dB (0.46 − 0.71V)
level difference between the channels: within 1.0 dB.

Adjustment Location: MD-A/-B board

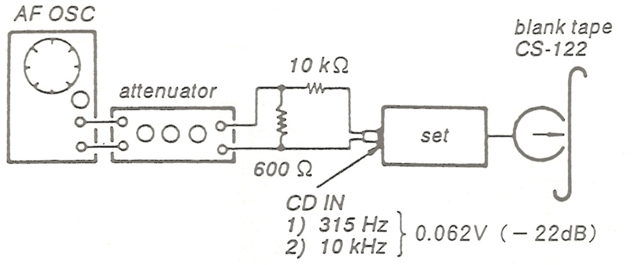
Record BIAS Current Adjustment DECK B

Setting:

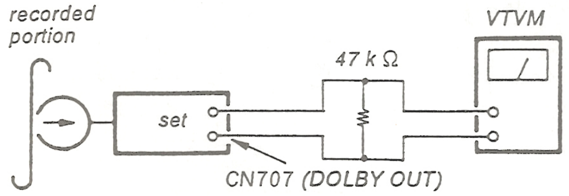
- REC LEVEL control:standard record (See page 4.)
- Short test pin CN707 (TEST) on main board

Procedure:

1. Mode record


AF OSC
attenuator
10 kΩ
600 Ω
set
blank tape
CS-122
CD IN
1) 315 Hz
2) 10 kHz
0.062V (− 22dB)

2. Mode: playback


recorded
portion
VTVM
47 k Ω
set
CN707 (DOLBY OUT)

Confirm that the 10 kHz playback output is 0 ± 0.5 dB relative to the 315 Hz output. If necessary, adjust RV42 (L-CH), RV62 (R-CH) and repeat the steps given above.

Adjustment Location: MD-A/-B board

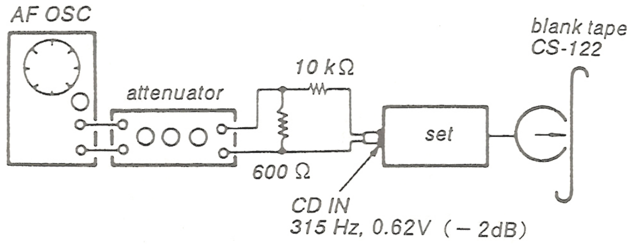
Record Level Adjustment DECK B

Setting:

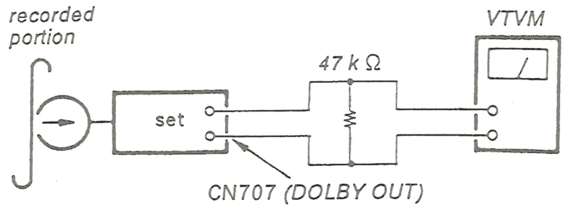
- REC LEVEL control:standard record (See page 4.)
- Short test pin CN707 (TEST) on main board

Procedure:

1. Mode: record


AF OSC
attenuator
10 kΩ
600 Ω
set
blank tape
CS-122
CD IN
315 Hz, 0.62V (− 2dB)

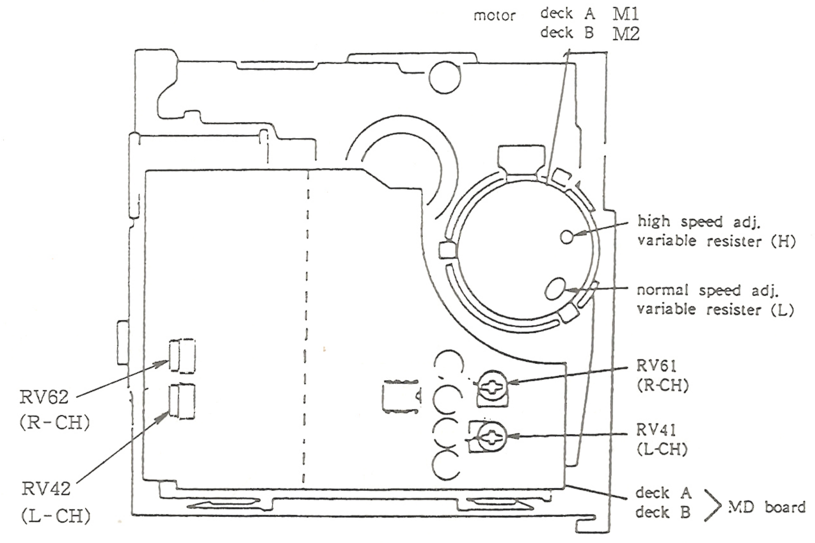
2. Mode: playback


recorded
portion
VTVM
47 k Ω
set
CN707 (DOLBY OUT)

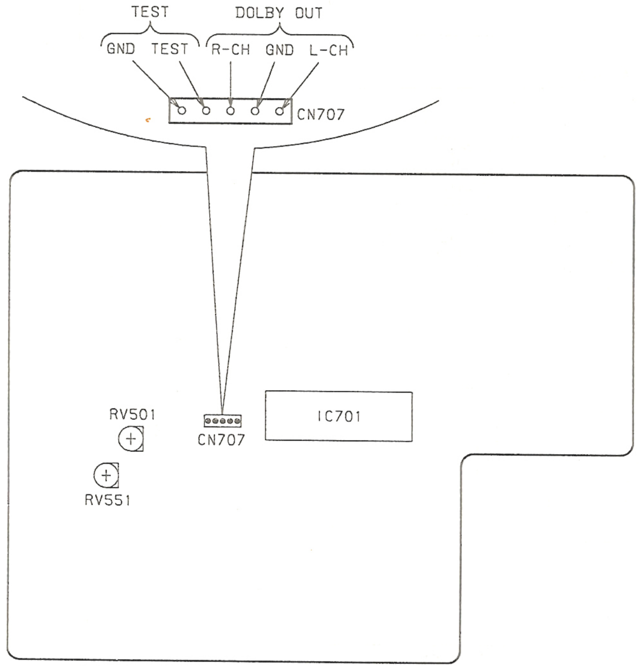
3. Play back the signal recorded in step 1.
Confirm that the signal level is within − 2.7 ± 0.5 dB (0.54 − 0.60 V). If necessary, adjust RV501 (L-CH), RV551 (R-CH) and repeat the step 1 − 3.

Adjustment Location: main board

– Adjustment Parts Location Diagrams –


motor
deck A M1
deck B M2
high speed adj. variable resister (H)
normal speed adj. variable resister (L)
RV61 (R-CH)
RV41 (L-CH)
RV62 (R-CH)
RV42 (L-CH)
deck A
deck B
MD board

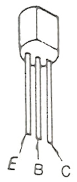
– main board –


TEST
DOLBY OUT
GND
TEST
R-CH
GND
L-CH
CN707
RV501
RV551
CN707
IC701

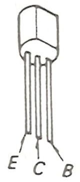
SECTION 3
DIAGRAMS

3-1. SEMICONDUCTOR LEAD LAYOUTS

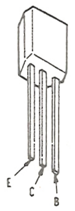
2SB1116



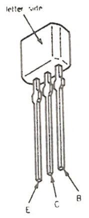
2SB1013-4
2SC945-P
2SC1841-PAFAEA
2SD1616A-K
2SD1387



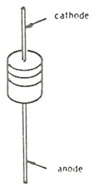
DTA124ES
DTA114ES
DTC114ES
2SC2603-EF
2SC3622A-LK



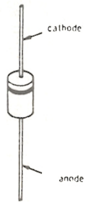
2SA1175-HFE


letter side
E
C
B

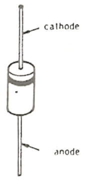
HZS7C2L
HZS6B3L
HZS30-3L
1SS120
1SS202-1
11EQS04


cathode
anode

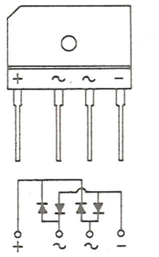
UZP-5.1BB


cathode
anode

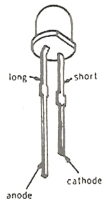
HZ3CLL
10E2N


cathode
anode

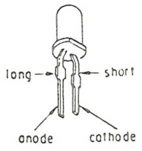
RBV-602-01



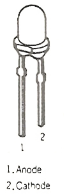
SEL2210S


long
short
anode
cathode

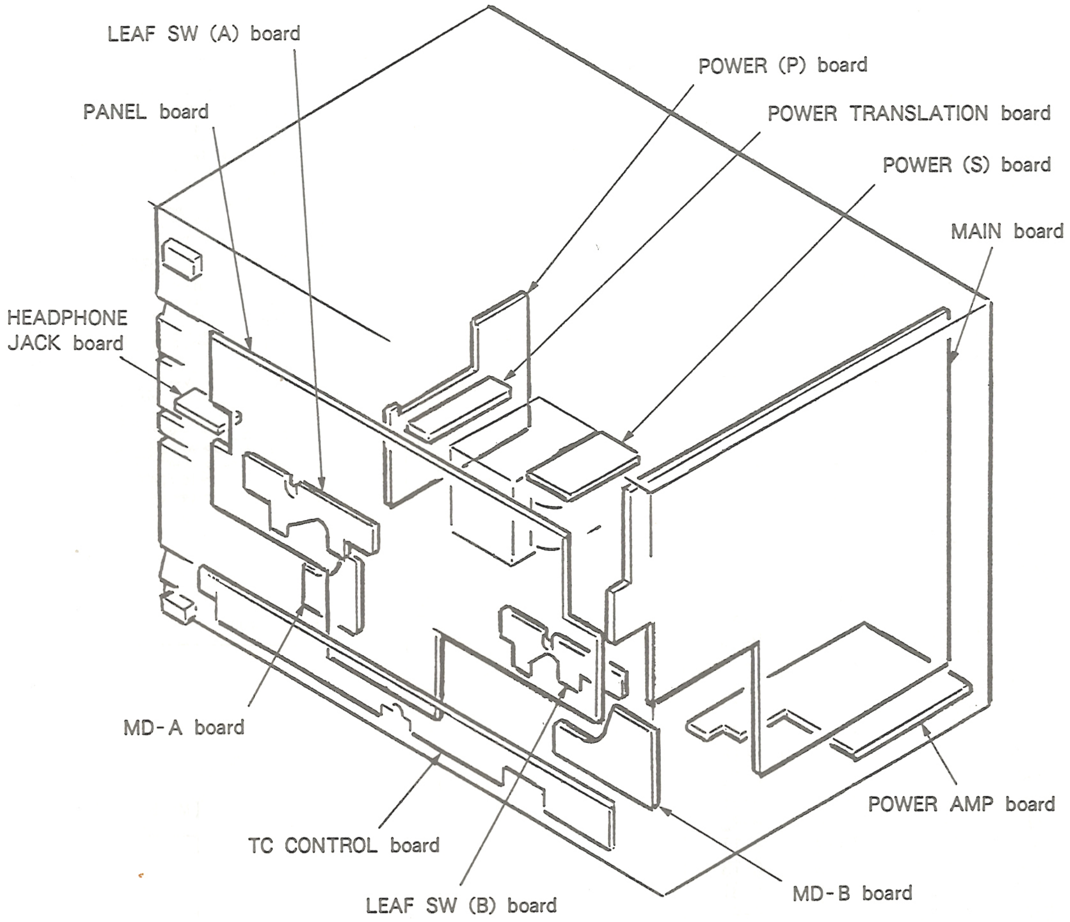
SEL2410E-D
SEL2910A-D


long
short
anode
cathode

SLP9070


1
2
1. Anode
2. Cathode

3-2. CIRCUIT BOARDS LOCATION

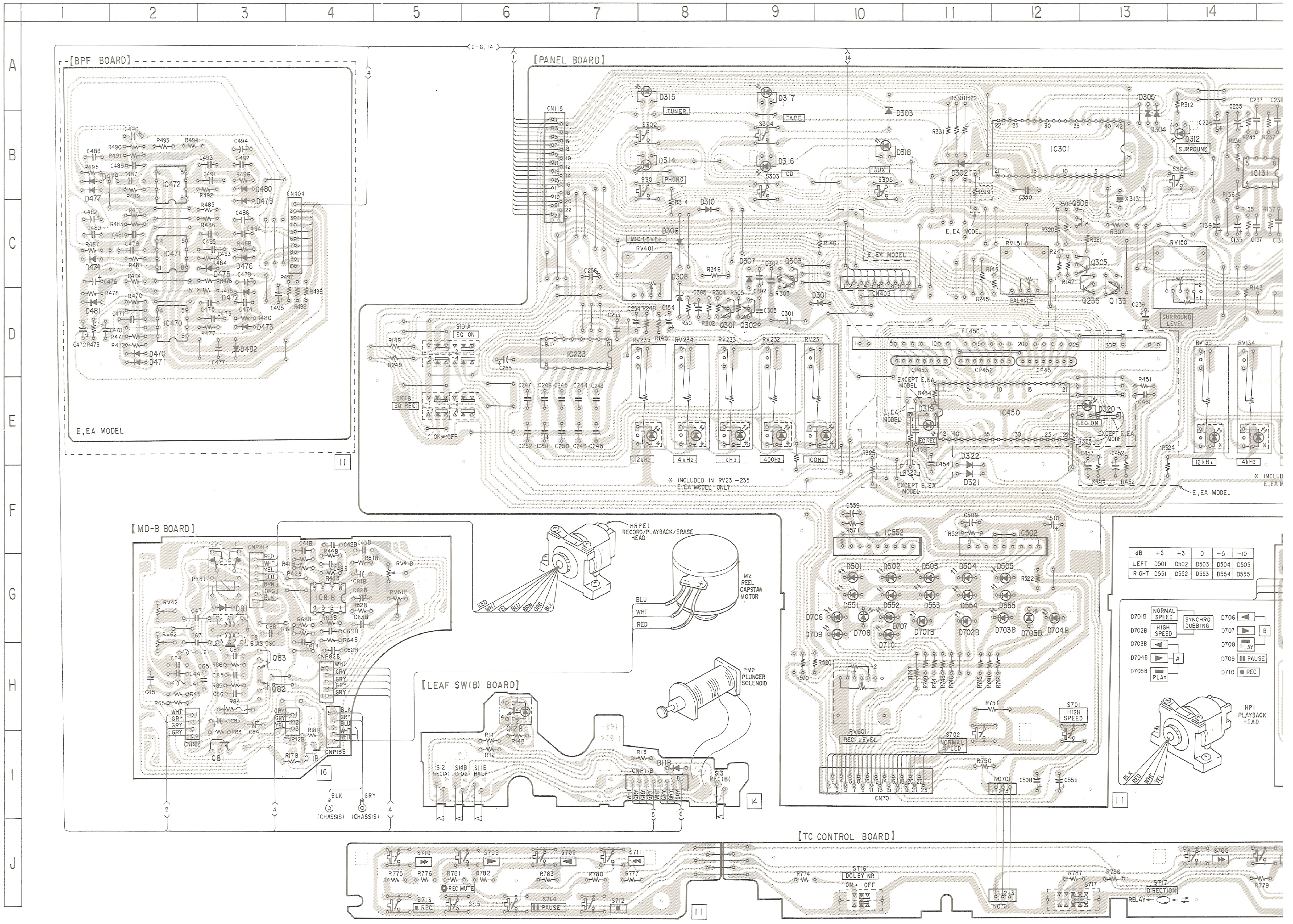

LEAF SW (A) board
POWER (P) board
PANEL board
POWER TRANSLATION board
POWER (S) board
MAIN board
HEADPHONE JACK board
MD-A board
POWER AMP board
TC CONTROL board
MD-B board
LEAF SW (B) board

- Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D11A	I-20	IC101	E-27
D11B	I-8	IC105	B-27
D81	G-3	IC130	B-26
D180	H-31	IC131	B-15
D190	H-32	IC132	B-16
D191	J-29	IC133	D-17
D192	J-29	IC170	H-30
D280	H-31	IC190	J-31
D301	D-10	IC201	D-27
D302	B-11	IC233	D-7
D303	A-10	IC301	B-12
D304	A-14	IC302	B-19
D305	A-13	IC401	D-19
D306	C-8	IC450	E-12
D307	C-9	IC470	D-2
D308	D-8	IC471	C-2
D309	B-20	IC472	B-2
D310	C-8	IC501	B-22
D311	B-16	IC502	F-12
D312	B-14	IC551	B-24
D314	B-8	IC552	F-10
D315	A-8	IC601	G-26
D316	B-9	IC602	H-27
D317	A-9	IC603	D-23
D318	B-10	IC604	B-25
D319	E-11	IC701	E-23
D320	E-13	IC901	D-30
D321	F-11	IC902	E-30
D322	F-11	IC903	D-30
D470	D-2	IC904	H-25
D471	D-2		
D472	D-3	Q11A	I-16
D473	D-3	Q11B	I-4
D474	C-1	Q12A	H-18
D475	C-3	Q12B	H-6
D476	C-3	Q81	I-3
D477	B-1	Q82	H-3
D478	B-1	Q83	H-3
D479	B-3	Q132	C-16
D480	B-3	Q133	C-13
D481	D-1	Q180	H-31
D482	D-3	Q190	H-32
D501	G-10	Q232	B-17
D502	G-10	Q233	C-13
D503	G-11	Q280	H-31
D504	G-11	Q301	D-9
D505	G-12	Q302	D-9
D551	G-10	Q303	C-9
D552	G-10	Q305	C-13
D553	G-11	Q306	B-17
D554	G-11	Q307	A-17
D555	G-12	Q308	C-13
D601	D-23	Q501	B-25
D602	F-24	Q502	F-27
D701A	D-19	Q504	B-23
D701B	G-11	Q551	E-26
D702A	F-19	Q552	F-28
D702B	G-11	Q554	B-23
D703A	E-24	Q601	G-26
D703B	G-12	Q701	E-19
D704A	E-24	Q702	E-19
D704B	G-12	Q703	E-20
D705A	E-25	Q704	F-20
D705B	G-12	Q705	F-19
D706	G-10	Q706	F-20
D707	G-10	Q707	F-22
D708	G-10	Q708	F-22
D709	G-10	Q709	F-24
D710	G-10	Q710	F-25
D901	H-22	Q711	D-21
D902	H-24	Q712	D-21
D903	H-24	Q713	D-21
D904	G-24	Q714	D-20
D905	G-24	Q715	D-20
D906	E-30	Q716	D-20
D907	D-30	Q717	D-20
D908	I-22	Q718	D-20
D909	I-21	Q719	E-24
D910	I-26	Q720	F-24
		Q722	F-24
IC81A	G-16	Q901	I-22
IC81B	G-4		

3-3. PRINTED WIRING BOARDS

- See page 8 for Semiconductor Lead Layouts.
- See page 9 for Circuit Boards Location.

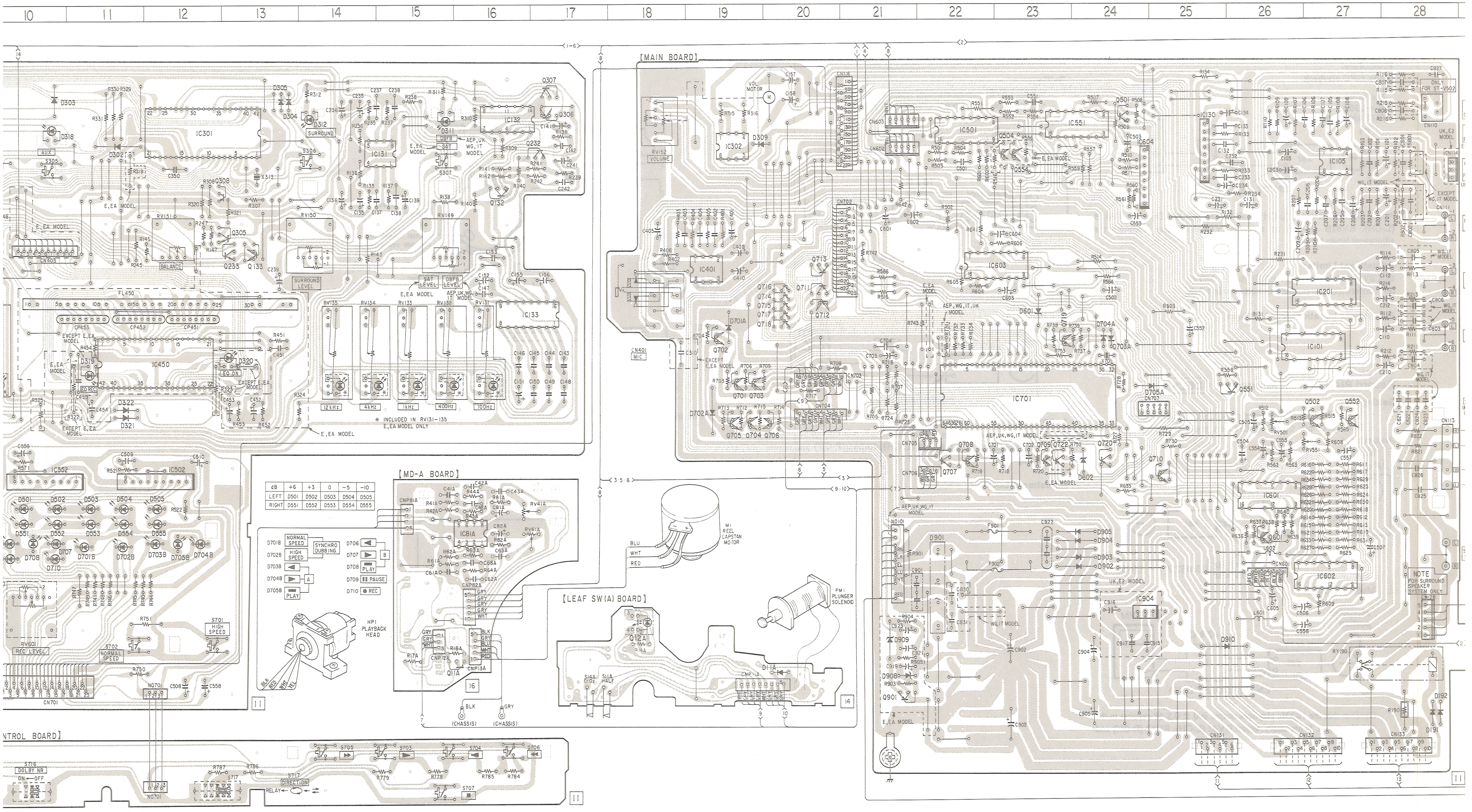

1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
[BPF BOARD]
[PANEL BOARD]
[MD-B BOARD]
[LEAF SW(B) BOARD]
[TC CONTROL BOARD]
E,EA MODEL
HRPE1 RECORD/PLAYBACK/ERASE HEAD
M2 REEL CAPSTAN MOTOR
PM2 PLUNGER SOLENOID
HP1 PLAYBACK HEAD
TUNER
TAPE
PHONO
CD
AUX
SURROUND
MIC LEVEL
BALANCE
SURROUND LEVEL
EQ ON
EQ REC
ON OFF
12kHz
4kHz
1kHz
400Hz
100Hz
* INCLUDED IN RV231-235 E,EA MODEL ONLY
EXCEPT E,EA MODEL
REC LEVEL
HIGH SPEED
NORMAL SPEED
SYNCHRO DUBBING
PLAY
PAUSE
REC
REC MUTE
DOLBY NR
DIRECTION
RELAY
(CHASSIS)
BLK
GRY
RED
WHT
YEL
BLU
BRN
ORG

Note on Mounting Diagram:

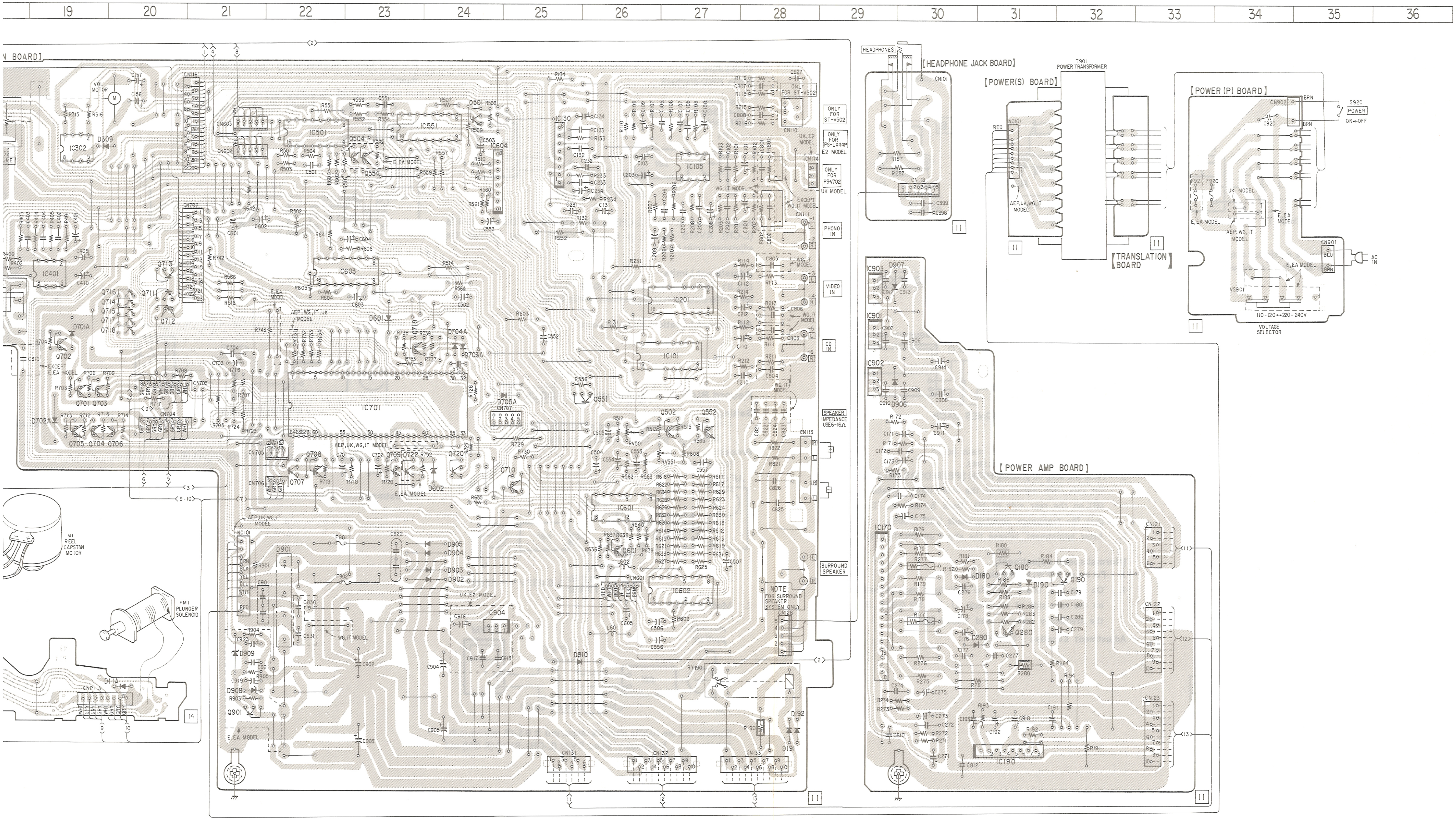
- ○——— : parts extracted from the component side.
- ⁝⁝ indicates side identified with part number.

- Mark "E, (E3) Model" is used as mark "E, (E3) and Australia Model".

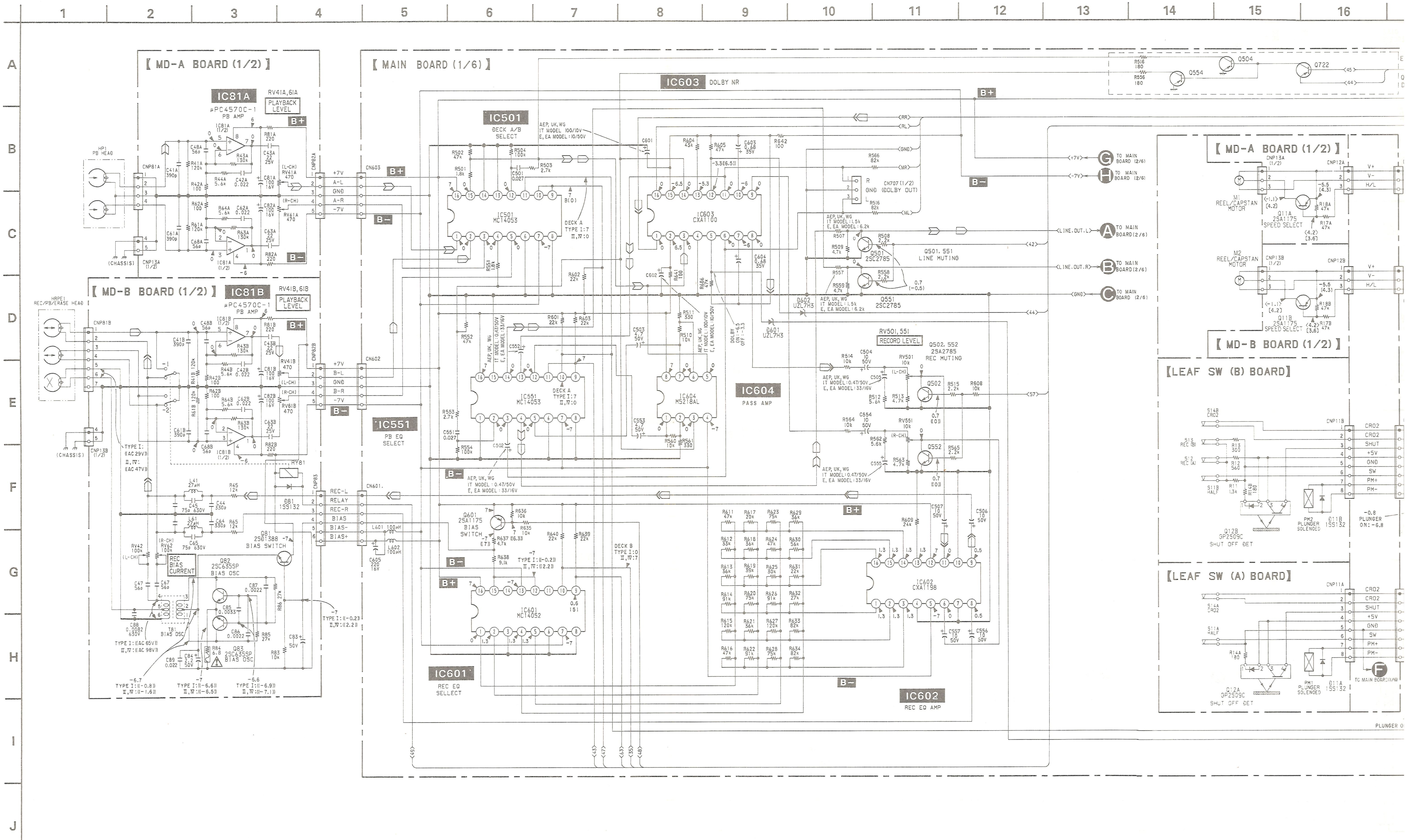
cation.


10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
[MAIN BOARD]
[MD-A BOARD]
[LEAF SW(A) BOARD]
NTROL BOARD]
IC301
IC131
IC132
IC133
IC450
IC302
IC401
IC501
IC551
IC603
IC701
IC601
IC602
IC201
IC101
IC105
IC130
IC552
IC502
IC81A
IC904
SURROUND
BALANCE
SURROUND LEVEL
SAT LEVEL
DBFB LEVEL
RV152 VOLUME
VOL MOTOR
CN401 MIC
12kHz
4kHz
1kHz
400Hz
100Hz
* INCLUDED IN RV131-135 E,EA MODEL ONLY
E,EA MODEL
EXCEPT E,EA MODEL
AEP,UK,WG,IT MODEL
UK,E2 MODEL
WG,IT MODEL
ONLY FOR ST-V502
EQ REC
EQ ON
AUX
RV601 REC LEVEL
S701 HIGH SPEED
S702 NORMAL SPEED
D701B NORMAL SPEED
D702B HIGH SPEED
SYNCHRO DUBBING
D703B
D704B
D705B PLAY
D706
D707
D708 PLAY
D709 PAUSE
D710 REC
A
B
HP1 PLAYBACK HEAD
M1 REEL CAPSTAN MOTOR
BLU
WHT
RED
PM1 PLUNGER SOLENOID
S14A HALF
S13A REC
BLK (CHASSIS)
GRY (CHASSIS)
NOTE FOR SURROUND SPEAKER SYSTEM ONLY
S716 DOLBY NR ON OFF
S717 DIRECTION
RELAY
S703
S704
S705
S706
S707
CN131
CN132
CN133
CN701
N0701

dB	+6	+3	0	−5	−10
LEFT	D501	D502	D503	D504	D505
RIGHT	D551	D552	D553	D554	D555


19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36
[HEADPHONE JACK BOARD]
HEADPHONES
[POWER(S) BOARD]
T901 POWER TRANSFORMER
[POWER (P) BOARD]
S920 POWER ON↔OFF
[TRANSLATION BOARD]
VOLTAGE SELECTOR
110-120↔220-240V
AC IN
[POWER AMP BOARD]
IC701
IC501
IC551
IC603
IC201
IC101
IC105
IC601
IC602
IC904
IC170
IC190
IC302
IC401
VOL MOTOR
M1 REEL CAPSTAN MOTOR
PM1 PLUNGER SOLENOID
PHONO IN
VIDEO IN
CD IN
SPEAKER IMPEDANCE USE 6-16Ω
SURROUND SPEAKER
NOTE FOR SURROUND SPEAKER SYSTEM ONLY
ONLY FOR ST-V502
ONLY FOR PS-LX44P
ONLY FOR PSV702
UK, E2 MODEL
EXCEPT WG, IT MODEL
E, EA MODEL
AEP, UK, WG, IT MODEL
CN131
CN132
CN133
RY190

3-4. SCHEMATIC DIAGRAM (DECK SECTION)



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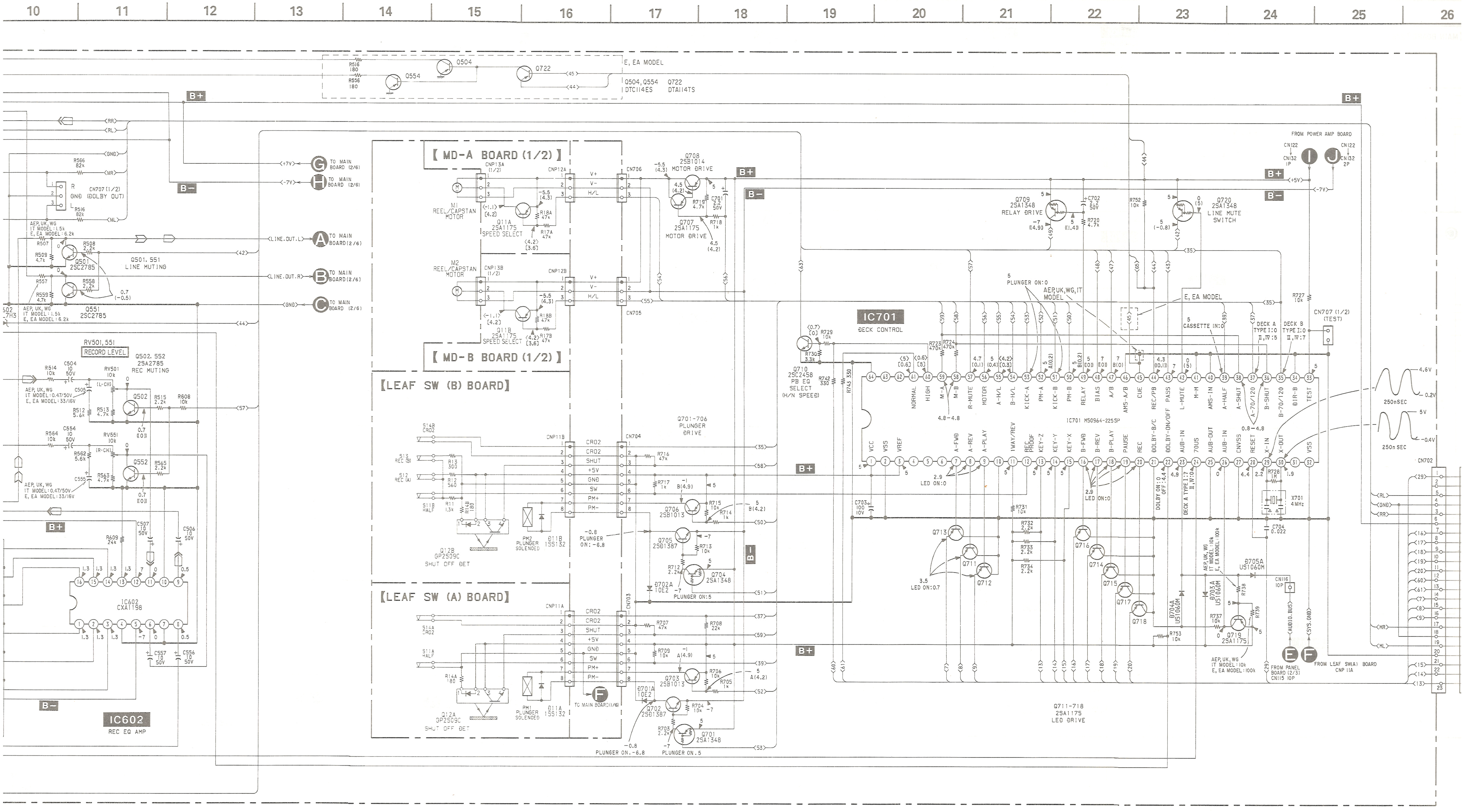
16
A
B
C
D
E
F
G
H
I
J
【MD-A BOARD (1/2)】
【MAIN BOARD (1/6)】
【MD-B BOARD (1/2)】
【MD-A BOARD (1/2)】
【MD-B BOARD (1/2)】
【LEAF SW (B) BOARD】
【LEAF SW (A) BOARD】
IC81A
μPC4570C-1
PB AMP
RV41A, 61A
PLAYBACK LEVEL
IC81B
RV41B, 61B
HP1
PB HEAD
HRPE1
REC/PB/ERASE HEAD
(CHASSIS)
CNP81A
CNP13A (1/2)
CNP81B
CNP13B (1/2)
CNP82A
CNP82B
CNP83
CN603
CN602
CN601
+7V
A-L
GND
A-R
-7V
B-L
B-R
REC-L
RELAY
REC-R
BIAS
BIAS-
BIAS+
B+
B-
IC501
DECK A/B SELECT
MC14053
IC603
DOLBY NR
CXA1100
IC551
PB EQ SELECT
IC604
PASS AMP
M5218AL
IC601
REC EQ SELLECT
MC14052
IC602
REC EQ AMP
CXA1198
RY81
D81
1SS132
Q81
2SD1388
BIAS SWITCH
Q82
2SC635SP
BIAS OSC
Q83
2SC635SP
BIAS OSC
T81
BIAS OSC
REC BIAS CURRENT
Q601
2SA1175
BIAS SWITCH
Q501, 551
LINE MUTING
2SC2785
Q502, 552
2SA2785
REC MUTING
RV501, 551
RECORD LEVEL
D601
UZL7H3
D602
UZL7H3
CN707 (1/2)
GND (DOLBY OUT)
DECK A
TYPE I : 7
II, IV : 0
DECK B
TYPE I : 0
II, IV : 7
DOLBY ON: -5 OFF: -3.3
AEP, UK, WG
IT MODEL : 0.47/50V
E, EA MODEL : 33/16V
TO MAIN BOARD (2/6)
LINE.OUT.L
LINE.OUT.R
G
H
A
B
C
F
Q504
Q554
Q722
M1
REEL/CAPSTAN MOTOR
M2
REEL/CAPSTAN MOTOR
Q11A
2SA1175
SPEED SELECT
Q11B
2SA1175
SPEED SELECT
CNP12A
CNP12B
CNP11A
CNP11B
V+
V-
H/L
CRO2
SHUT
+5V
GND
SW
PM+
PM-
S13
REC (B)
S12
REC (A)
S11B
HALF
S14B
CRO2
S14A
CRO2
S11A
HALF
Q12B
GP2S09C
SHUT OFF DET
Q12A
GP2S09C
SHUT OFF DET
PM2
PLUNGER SOLENOID
PM1
PLUNGER SOLENOID
D11B
1SS132
D11A
1SS132
-0.8
PLUNGER ON: -6.8
TO MAIN BOARD (1/6)
PLUNGER O
TYPE I : (AC 29V)
II, IV : (AC 47V)
TYPE I : (AC 65V)
II, IV : (AC 98V)



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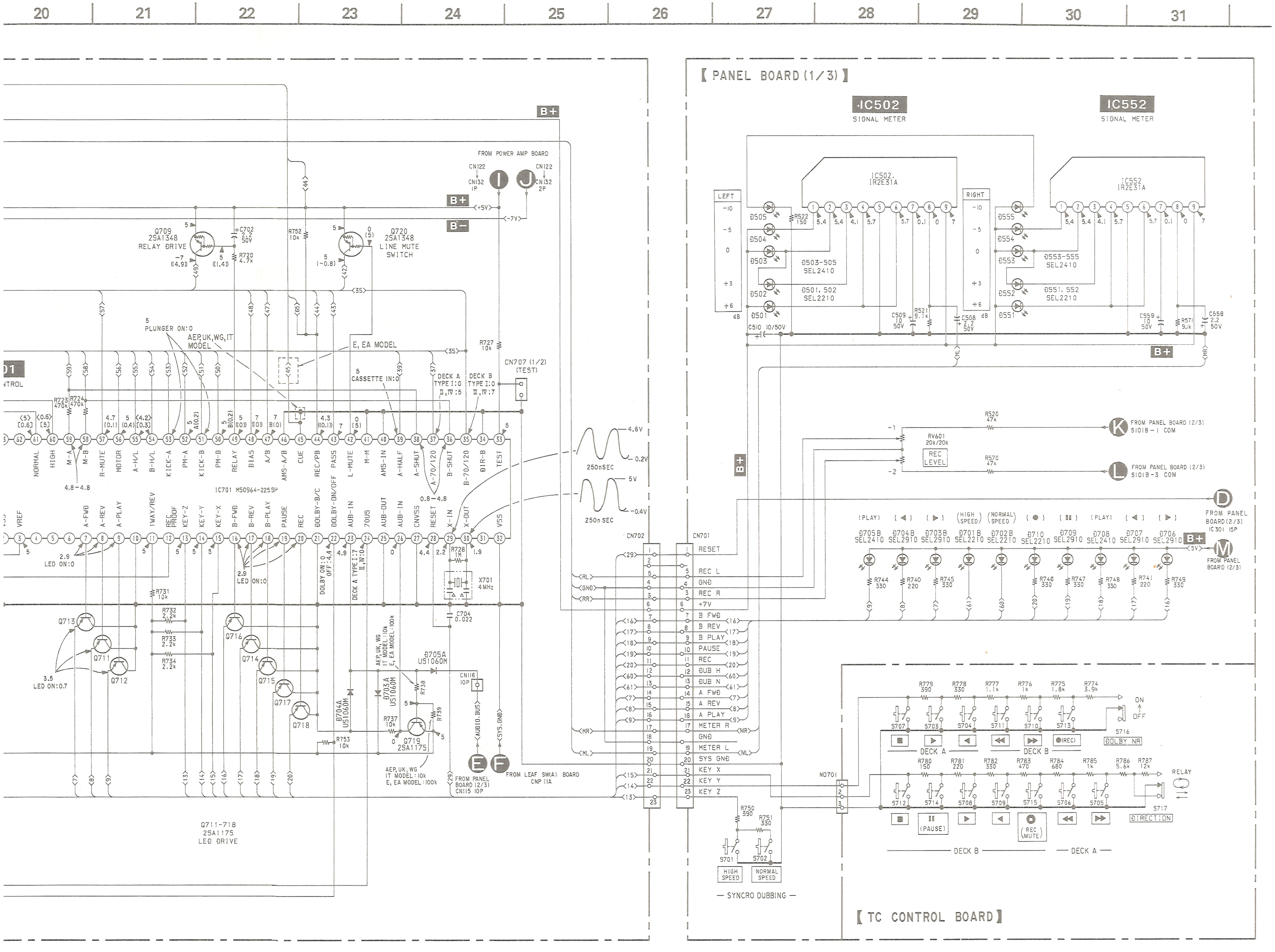
25
26
E, EA MODEL
Q504, Q554 DTC114ES
Q722 DTA114TS
B+
B−
【 MD-A BOARD (1/2) 】
【 MD-B BOARD (1/2) 】
【LEAF SW (B) BOARD】
【LEAF SW (A) BOARD】
M1 REEL/CAPSTAN MOTOR
M2 REEL/CAPSTAN MOTOR
Q11A 2SA1175 SPEED SELECT
Q11B 2SA1175 SPEED SELECT
Q708 2SB1014 MOTOR DRIVE
Q707 2SA1175 MOTOR DRIVE
TO MAIN BOARD (2/6)
LINE.OUT.L
LINE.OUT.R
Q501, 551 LINE MUTING
Q501 2SC2785
Q551 2SC2785
CN707 (1/2) (DOLBY OUT)
RV501, 551 RECORD LEVEL
Q502, 552 2SA2785 REC MUTING
IC602 CXA1198
IC602 REC EQ AMP
Q12B GP2S09C SHUT OFF DET
Q12A GP2S09C SHUT OFF DET
PM2 PLUNGER SOLENOID
PM1 PLUNGER SOLENOID
D11B 1SS132
D11A 1SS132
Q701-706 PLUNGER DRIVE
Q706 2SB1013
Q705 2SB1387
Q704 2SA1348
Q703 2SB1013
Q702 2SB1387
Q701 2SA1348
PLUNGER ON: −6.8
PLUNGER ON: 5
TO MAIN BOARD (1/6)
IC701 DECK CONTROL
IC701 M50964-225SP
Q710 2SC2458 PB EQ SELECT (H/N SPEED)
Q709 2SA1348 RELAY DRIVE
Q720 2SA1348 LINE MUTE SWITCH
FROM POWER AMP BOARD
CN707 (1/2) (TEST)
DECK A TYPE I:0 II, IV:5
DECK B TYPE I:0 II, IV:7
CASSETTE IN:0
PLUNGER ON:0
AEP, UK, WG, IT MODEL
E, EA MODEL
NORMAL
HIGH
M-A
M-B
R-MUTE
MOTOR
A-H/L
B-H/L
KICK-A
PM-A
KICK-B
PM-B
RELAY
BIAS
A/B
AMS-A/B
CUE
REC/PB
PASS
L-MUTE
M-M
AMS-IN
A-HALF
A-SHUT
A-70/120
B-SHUT
B-70/120
BIR-B
TEST
VCC
VSS
VREF
A-FWD
A-REV
A-PLAY
1WAY/REV
REC PROOF
KEY-Z
KEY-Y
KEY-X
B-FWD
B-REV
B-PLAY
PAUSE
REC
DOLBY-B/C
DOLBY-ON/OFF
AUB-IN
70US
AUB-OUT
AUB-IN
CNVSS
RESET
X-IN
X-OUT
VSS
X701 4MHz
LED ON:0
LED ON:0.7
Q711-718 2SA1175 LED DRIVE
D705A US1060M
D704A US1060M
D703A US1060M
Q719 2SA1175
CN116 10P
AUDIO.BUS
SYS.GND
FROM PANEL BOARD (2/3) CN115 10P
FROM LEAF SW(A) BOARD CNP 11A
CN702
250nSEC


20
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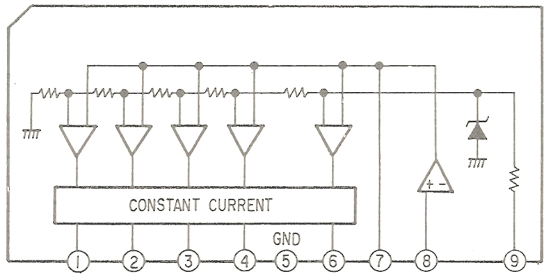
22
23
24
25
26
27
28
29
30
31
【PANEL BOARD (1/3)】
IC502
SIGNAL METER
IC552
SIGNAL METER
IC502 IR2E31A
IC552 IR2E31A
LEFT
RIGHT
D501–D505
D503-505 SEL2410
D501, 502 SEL2210
D553-555 SEL2410
D551, 552 SEL2210
B+
B−
FROM POWER AMP BOARD
CN122
CN132 1P
CN132 2P
Q709 2SA1348 RELAY DRIVE
Q720 2SA1348 LINE MUTE SWITCH
PLUNGER ON:0
AEP,UK,WG,IT MODEL
E, EA MODEL
CASSETTE IN:0
DECK A TYPE I:0 II,IV:5
DECK B TYPE I:0 II,IV:7
CN707 (1/2) (TEST)
IC701 M50964-225SP
NORMAL
HIGH
M-A
M-B
R-MUTE
MOTOR
A-H/L
B-H/L
KICK-A
PM-A
KICK-B
PM-B
RELAY
BIAS
A/B
AMS-A/B
CUE
REC/PB
PASS
L-MUTE
M-M
AMS-IN
A-HALF
A-SHUT
A-70/120
B-SHUT
B-70/120
DIR-B
TEST
VREF
A-FWD
A-REV
A-PLAY
1WAY/REV
REC PROOF
KEY-Z
KEY-Y
KEY-X
B-FWD
B-REV
B-PLAY
PAUSE
REC
DOLBY-B/C
DOLBY-ON/OFF
AUB-IN
70US
AUB-OUT
AUB-IN
CNVSS
RESET
X-IN
X-OUT
VSS
LED ON:0
X701 4MHz
4.6V
0.2V
250nSEC
5V
0.4V
250nSEC
Q711-718 2SA1175 LED DRIVE
Q719 2SA1175
D705A US1060M
D704A US1060M
CN116 10P
FROM PANEL BOARD (2/3) CN115 10P
FROM LEAF SW(A) BOARD CNP 11A
CN702
CN701
RESET
REC L
GND
REC R
+7V
B FWD
B REV
B PLAY
PAUSE
REC
DUB H
DUB N
A FWD
A REV
A PLAY
METER R
GND
METER L
SYS GND
KEY X
KEY Y
KEY Z
RV601 20k/20k REC LEVEL
FROM PANEL BOARD (2/3) S101B-1 COM
FROM PANEL BOARD (2/3) S101B-3 COM
FROM PANEL BOARD (2/3) IC301 15P
FROM PANEL BOARD (2/3)
(PLAY)
(HIGH SPEED)
(NORMAL SPEED)
D705B SEL2410
D704B SEL2910
D703B SEL2910
D701B SEL2210
D702B SEL2210
D710 SEL2210
D709 SEL2910
D708 SEL2410
D707 SEL2910
D706 SEL2910
ON
OFF
S716 DOLBY NR
DECK A
DECK B
(REC)
(PAUSE)
(REC MUTE)
RELAY
S717 DIRECTION
N0701
S701 HIGH SPEED
S702 NORMAL SPEED
SYNCRO DUBBING
【TC CONTROL BOARD】

IC BLOCK DIAGRAM

IC502, 552 IR2E31A


CONSTANT CURRENT
GND
1
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3
4
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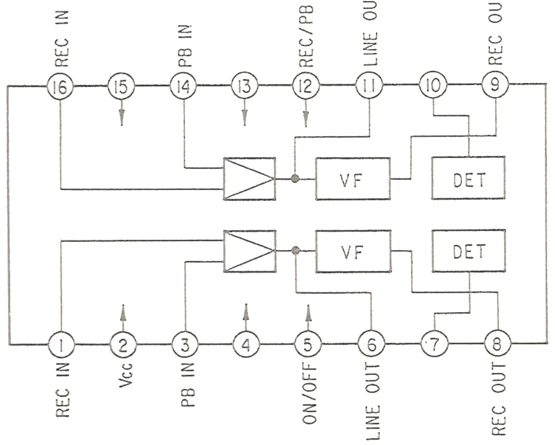
8
9

IC603 CXA1100


REC IN
PB IN
REC/PB
LINE OUT
REC OUT
16
15
14
13
12
11
10
9
VF
DET
VF
DET
1
2
3
4
5
6
7
8
REC IN
Vcc
PB IN
ON/OFF
LINE OUT
REC OUT

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

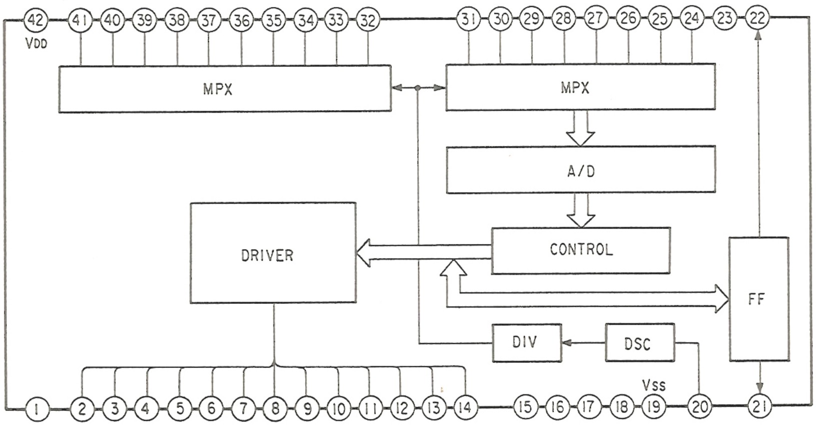
- B+ : B+ Line
- B− : B− Line
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : STOP MODE
  ( ) : PLAY MODE
  《 》: REC MODE
- Voltages are taken with a VOM (Input impedance 10M Ω) Voltage variations may be noted due to normal production tolerances.
- Signal path.

⇨	: PB (DECK A)	⇨	: FM
⇨	: PB (DECK B)	⇨	: CD
⇨》	: REC (DECK B)	⇨》	: PHONO

- Mark "E, (E3) Model" is used as mark "E, (E3) and Australia Model".

IC BLOCK DIAGRAM

IC450 LC7566


42
VDD
41
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38
37
36
35
34
33
32
31
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29
28
27
26
25
24
23
22
MPX
MPX
A/D
DRIVER
CONTROL
FF
DIV
DSC
Vss
1
2
3
4
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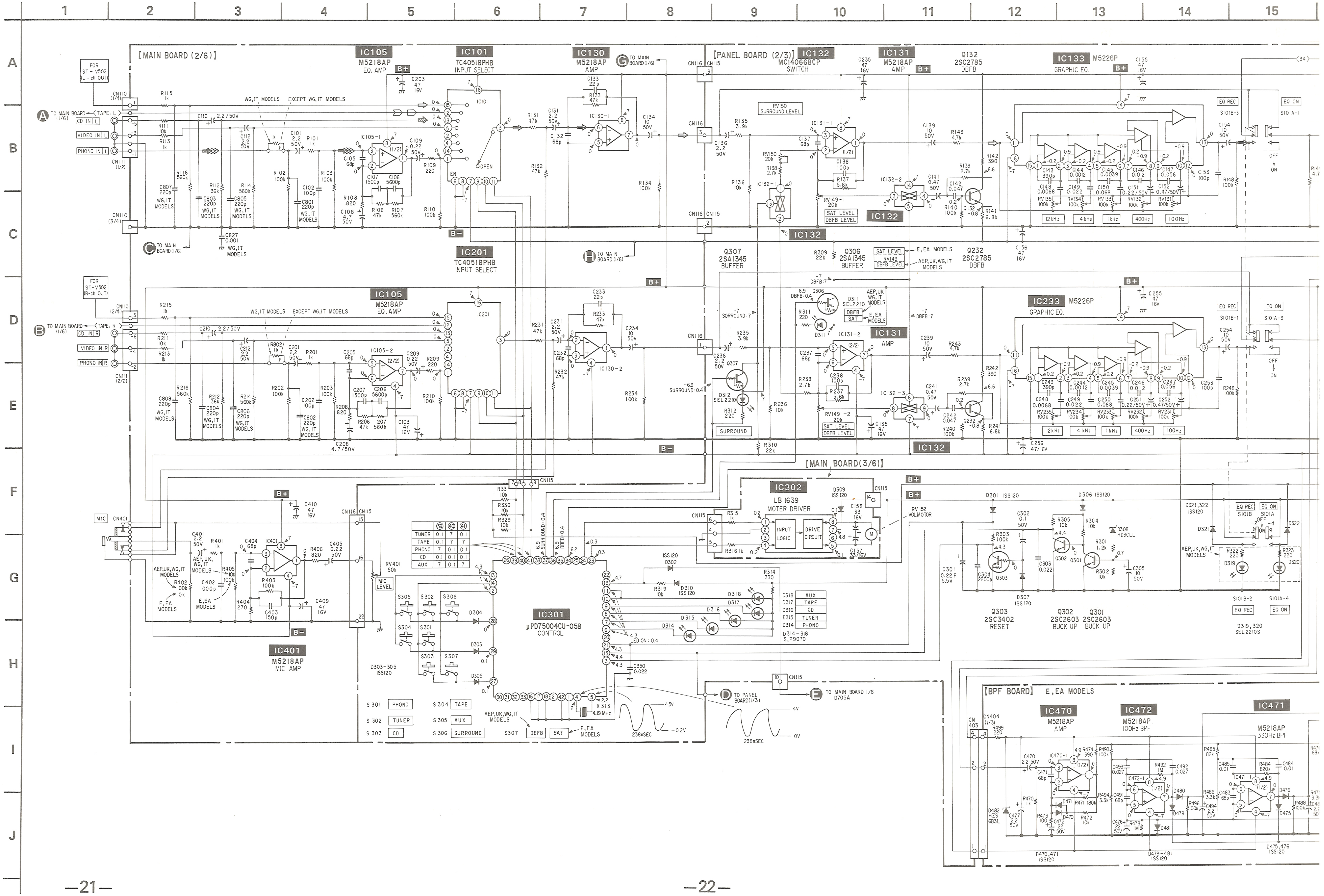
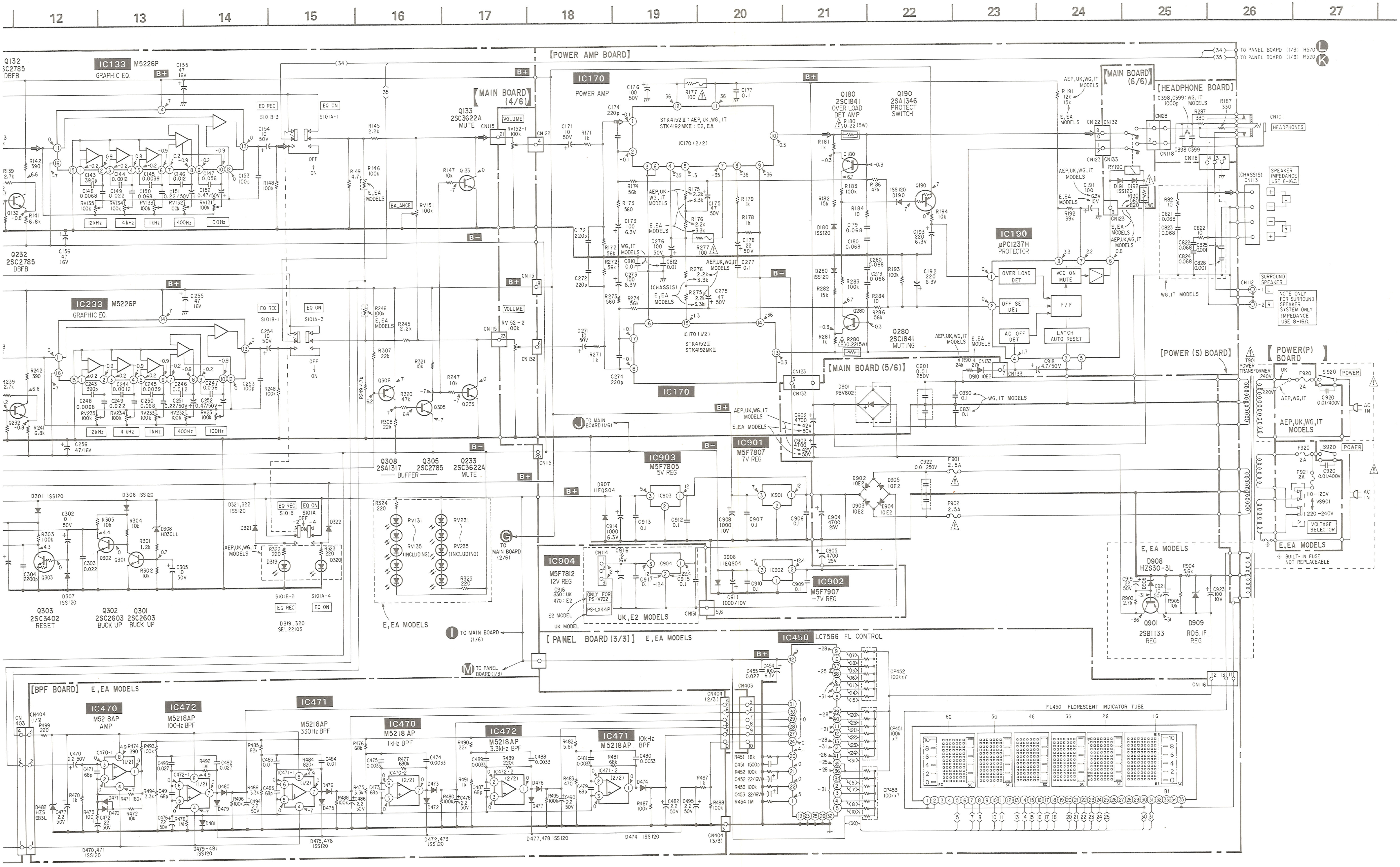
3-5. SCHEMATIC DIAGR (AMPLIFIER SECTION)

• See page 19 for notes.



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H I J
[MAIN BOARD (2/6)]
[PANEL BOARD (2/3)]
[MAIN BOARD (3/6)]
[BPF BOARD] E, EA MODELS
IC105 M5218AP EQ. AMP
IC101 TC4051BPHB INPUT SELECT
IC130 M5218AP AMP
IC132 MC14066BCP SWITCH
IC131 M5218AP AMP
Q132 2SC2785 DBFB
IC133 M5226P GRAPHIC EQ.
IC201 TC4051BPHB INPUT SELECT
IC233 M5226P GRAPHIC EQ.
Q307 2SA1345 BUFFER
Q306 2SA1345 BUFFER
Q232 2SC2785 DBFB
IC302 LB1639 MOTER DRIVER
IC301 μPD75004CU-058 CONTROL
IC401 M5218AP MIC AMP
Q303 2SC3402 RESET
Q302 2SC2603 BUCK UP
Q301 2SC2603 BUCK UP
IC470 M5218AP AMP
IC472 M5218AP 100Hz BPF
IC471 M5218AP 330Hz BPF
FOR ST-V502 (L-ch OUT)
FOR ST-V502 (R-ch OUT)
TO MAIN BOARD (1/6)
TAPE, L
CD IN L
VIDEO IN L
PHONO IN L
TAPE, R
CD IN R
VIDEO IN R
PHONO IN R
WG, IT MODELS
EXCEPT WG, IT MODELS
RV150 SURROUND LEVEL
SAT LEVEL
DBFB LEVEL
E, EA MODELS
AEP, UK, WG, IT MODELS
12kHz 4kHz 1kHz 400Hz 100Hz
EQ REC
EQ ON
S101B-3
S101A-1
S101B-1
S101A-3
OFF ON
SURROUND
MIC
MIC LEVEL
RV152 VOL MOTOR
TUNER TAPE PHONO CD AUX
INPUT LOGIC
DRIVE CIRCUIT
D303-305 1SS120
D314-318 SLP9070
D319, 320 SEL2210S
S301 PHONO
S302 TUNER
S303 CD
S304 TAPE
S305 AUX
S306 SURROUND
S307 DBFB SAT
X313 4.19MHz
238nSEC
TO PANEL BOARD (1/3)
TO MAIN BOARD 1/6 D705A
LED ON : 0.4


12
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22
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27
IC133 M5226P GRAPHIC EQ.
IC233 M5226P GRAPHIC EQ.
[POWER AMP BOARD]
IC170 POWER AMP
STK4152Ⅱ : AEP, UK, WG, IT
STK4192MKⅡ : E2, EA
IC170 (2/2)
IC170 (1/2)
IC170
[MAIN BOARD (4/6)]
[MAIN BOARD (5/6)]
[MAIN BOARD (6/6)]
[HEADPHONE BOARD]
HEADPHONES
Q133 2SC3622A MUTE
VOLUME
BALANCE
Q180 2SC1841 OVER LOAD DET AMP
Q190 2SA1346 PROTECT SWITCH
Q280 2SC1841 MUTING
IC190 µPC1237H PROTECTOR
OVER LOAD DET
OFF SET DET
AC OFF DET
VCC ON MUTE
F/F
LATCH AUTO RESET
SPEAKER IMPEDANCE USE 6-16Ω
SURROUND SPEAKER
NOTE ONLY FOR SURROUND SPEAKER SYSTEM ONLY IMPEDANCE USE 8-16Ω
[POWER (S) BOARD]
[POWER(P) BOARD]
POWER TRANSFORMER
AEP, UK, WG, IT MODELS
E, EA MODELS
POWER
AC IN
VOLTAGE SELECTOR
BUILT-IN FUSE NOT REPLACEABLE
IC901 M5F7807 7V REG
IC903 M5F7805 5V REG
IC904 M5F7812 12V REG
IC902 M5F7907 -7V REG
Q901 2SB1133 REG
D909 RD5.1F REG
D908 HZS30-3L
Q308 2SA1317 BUFFER
Q305 2SC2785
Q233 2SC3622A MUTE
Q132 2SC2785 DBFB
Q232 2SC2785 DBFB
Q303 2SC3402 RESET
Q302 2SC2603 BUCK UP
Q301 2SC2603 BUCK UP
EQ REC
EQ ON
TO MAIN BOARD (1/6)
TO MAIN BOARD (2/6)
TO PANEL BOARD (1/3)
TO PANEL BOARD (1/3) R570
TO PANEL BOARD (1/3) R520
[PANEL BOARD (3/3)] E, EA MODELS
UK, E2 MODELS
IC450 LC7566 FL CONTROL
FL450 FLORESCENT INDICATOR TUBE
[BPF BOARD] E, EA MODELS
IC470 M5218AP AMP
IC472 M5218AP 100Hz BPF
IC471 M5218AP 330Hz BPF
IC470 M5218 AP 1kHz BPF
IC472 M5218AP 3.3kHz BPF
IC471 M5218AP 10kHz BPF
12kHz
4kHz
1kHz
400Hz
100Hz

SECTION 4
EXPLODED VIEWS

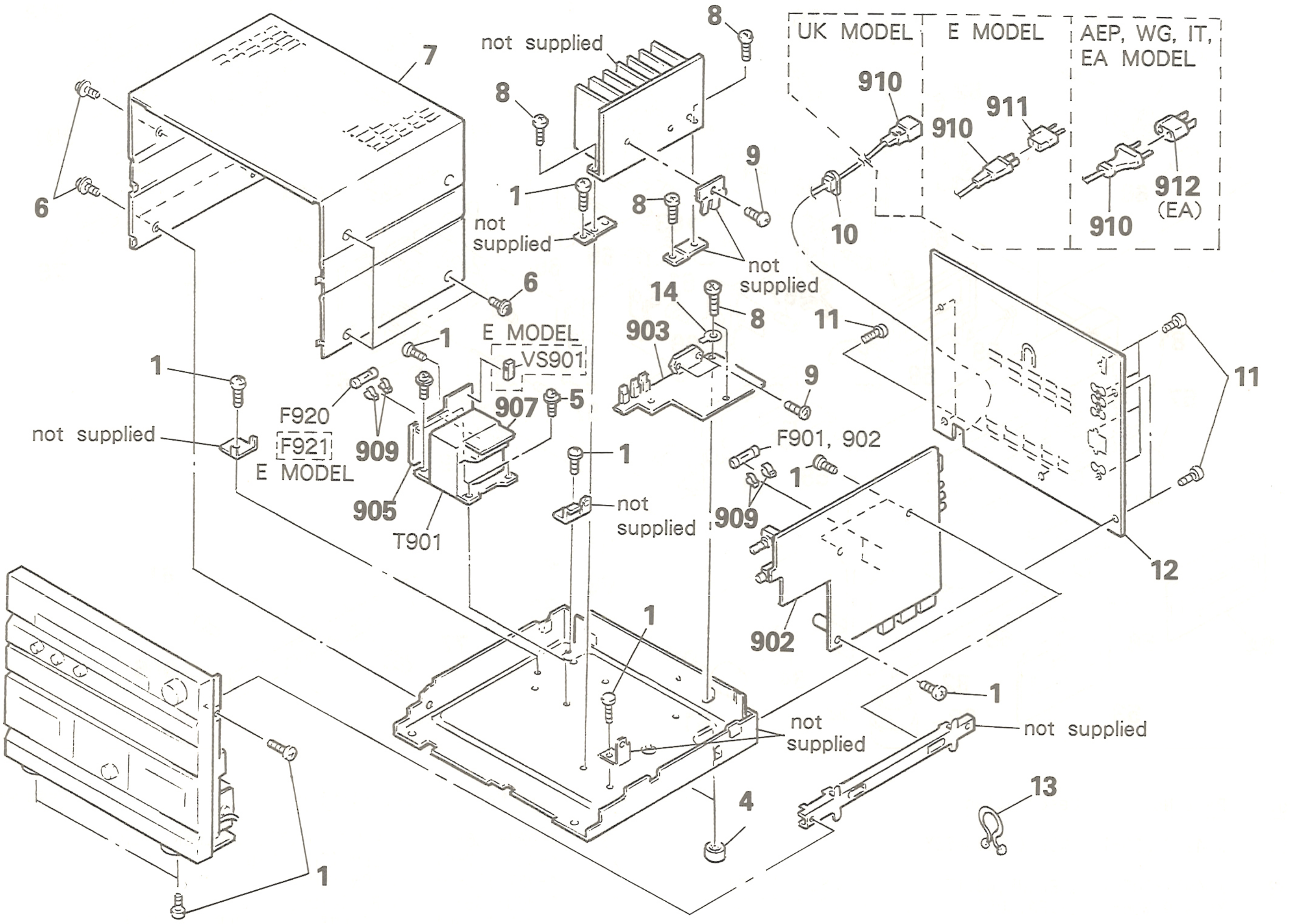
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts Example:
  (RED) ... KNOB, BALANCE (WHITE)
  ↑ Cabinet's Color ↑ Parts Color
- Mark "E, (E3) Model" is used as mark "E, (E3) and Australia Model".

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

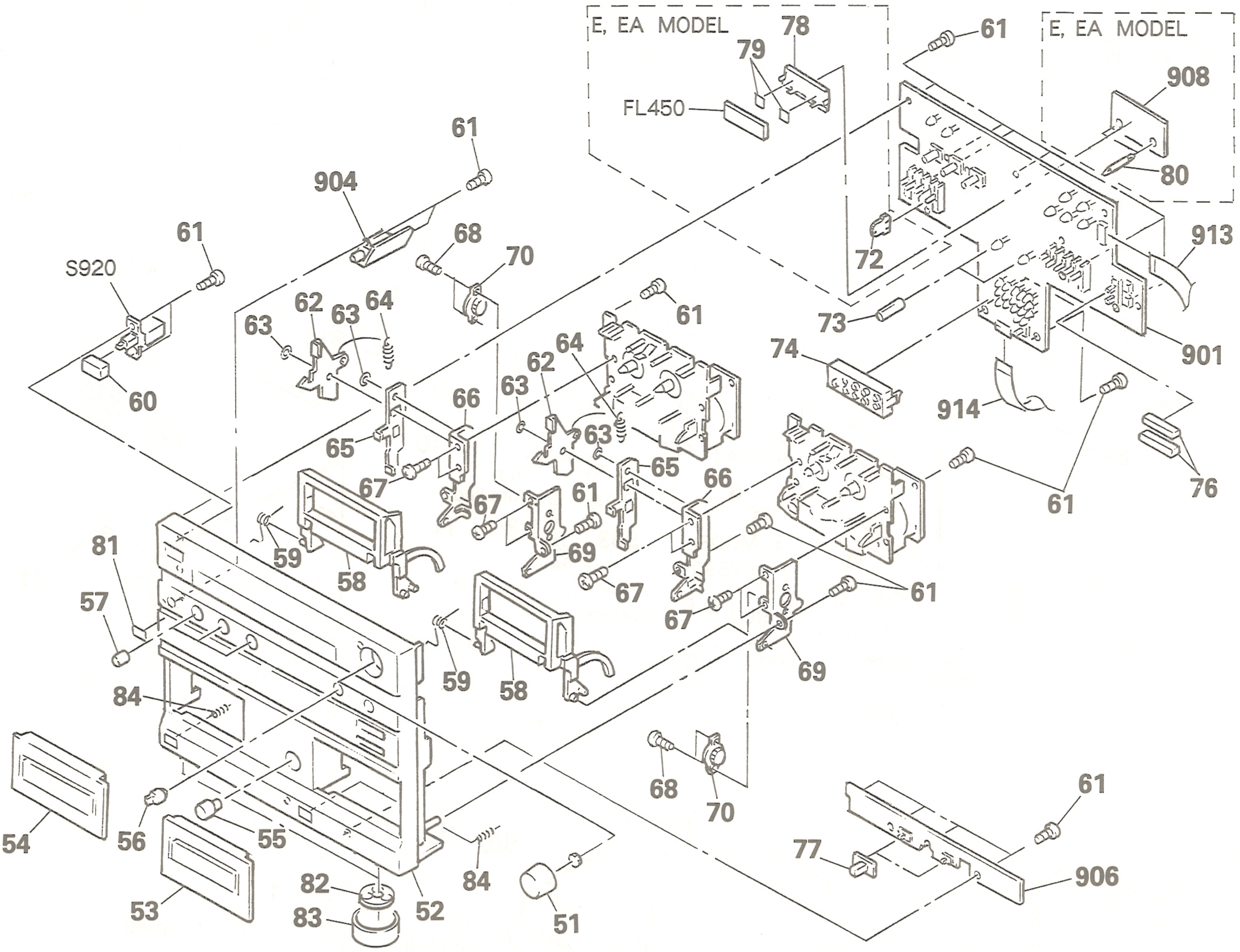
* WG : West Gremany model
IT : Italian model
EA : Saudi Arabia model
AUS : Australian model
E2 : E model with turntable system
E3 : E model without turntable system

4-1. OVERALL SECTION



No.	Part No.	Description	Remarks
1	7-682-547-04	SCREW +BVTT 3X6 (S)	
4	4-933-601-01	FOOT	
5	7-682-560-04	SCREW +BVTT 4X6 (S)	
6	3-704-366-01	SCREW (CASE) (M3X8)	
7	4-935-368-41	CASE	
8	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S	
9	4-928-635-11	SCREW, +BV (2.6X16) TAPPING	
10	*3-703-244-00	(AEP,UK,WG,IT,EA)...BUSHING (2104), CORD	
	3-703-571-00	(E,AUS)..........BUSHING (S)(4516), CORD	
11	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
12	*4-937-335-03	(AEP).........PANEL, BACK	
	*4-937-335-13	(E3,EA,AUS)...PANEL, BACK	
	*4-937-335-23	(WG)..........PANEL, BACK	
	*4-937-335-31	(UK)..........PANEL, BACK	
	*4-937-335-43	(E2)..........PANEL, BACK	
	*4-937-335-53	(IT)..........PANEL, BACK	
13	3-315-159-01	PURSE LOOK (DIA.14)	
14	*4-904-446-01	PLATE, GROUND	
902	*A-4334-486-A	(E3,EA,AUS)...MOUNTED PCB, MAIN	
	*A-4334-487-A	(AEP).........MOUNTED PCB, MAIN	
	*A-4334-488-A	(WG,IT).......MOUNTED PCB, MAIN	
	*A-4334-489-A	(UK)..........MOUNTED PCB, MAIN	
	*A-4334-535-A	(E2)..........MOUNTED PCB, MAIN	
903	*A-4334-823-A	(AEP,UK).....MOUNTED PCB, POWER AMPLIFIER	
	*A-4334-824-A	(WG,IT)......MOUNTED PCB, POWER AMPLIFIER	
	*A-4334-828-A	(E,EA,AUS)...MOUNTED PCB, POWER AMPLIFIER	
905	1-634-626-11	PC BOARD, POWER (P)	
907	*1-634-630-11	PC BOARD, POWER (S)	
909	1-533-213-31	HOLDER, FUSE	
910	⚠1-575-654-11	(AEP,WG,IT,EA)...CORD, POWER	
	⚠1-575-656-11	(E,AUS)..........CORD, POWER	
	⚠1-575-669-21	(UK).............CORD, POWER	
911	⚠1-569-007-11	(E,AUS)...ADAPTOR, CONVERSION 2P	
912	⚠1-569-008-11	(EA)...ADAPTOR, CONVERSION 2P	
F901	⚠1-532-286-00	FUSE T2.5A	
F902	⚠1-532-286-00	FUSE T2.5A	
F920	⚠1-532-388-51	FUSE T2A	
F921	⚠1-532-388-51	(E,EA,AUS)...FUSE T2A	
T901	⚠1-450-063-11	(AEP,UK,WG,IT)...TRANSFORMER, POWER	
T901	⚠1-450-064-11	(E,EA,AUS).......TRANSFORMER, POWER	
VS901	⚠1-571-722-11	(E,EA,AUS)...SWITCH, VOLTAGE SELECTION (VOLTAGE)	

4-2. FRONT PANEL SECTION

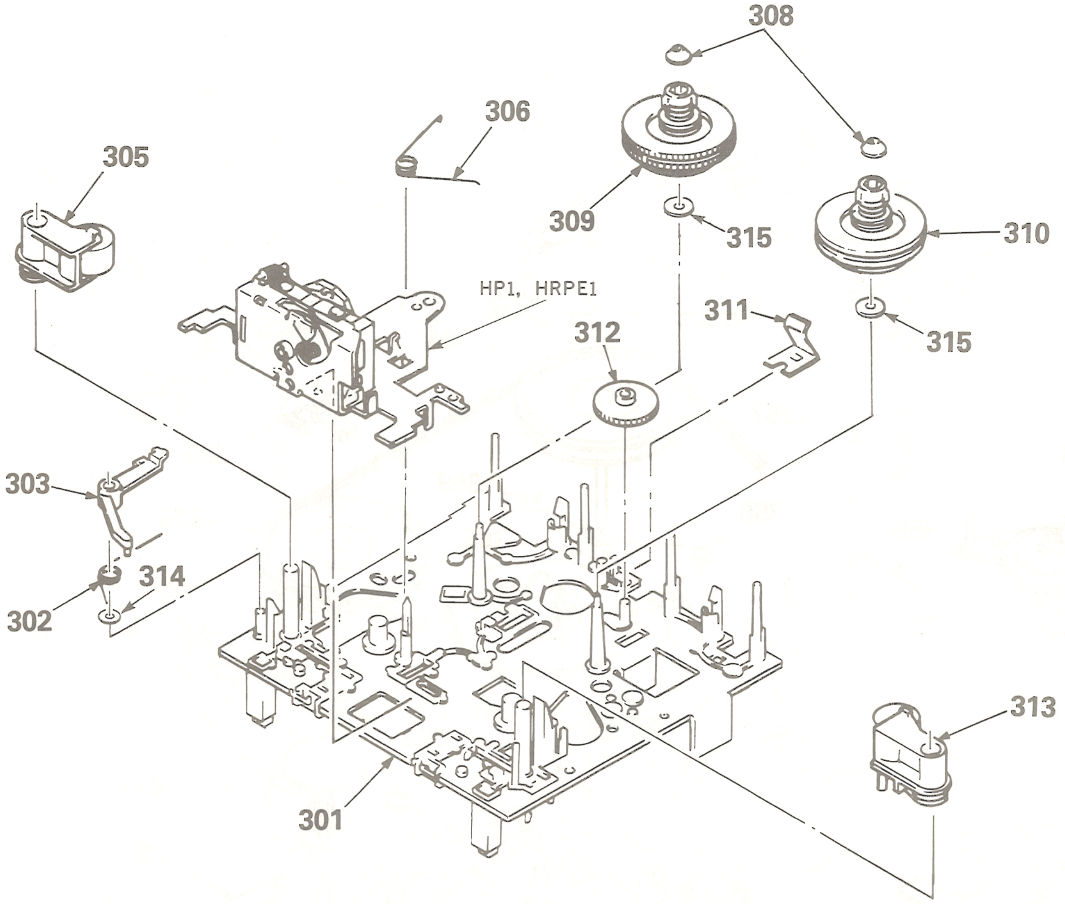

E, EA MODEL
78
79
FL450
61
E, EA MODEL
908
80
61
904
61
68
70
S920
62
63
64
63
72
913
73
61
74
901
60
64
62
63
66
65
63
65
914
66
67
67
61
76
61
81
59
58
69
57
67
61
67
69
59
58
84
68
70
61
54
56
55
77
906
82
84
53
52
51
83

No.	Part No.	Description	Remarks
51	X-4917-299-1	KNOB (VOL) ASSY	
52	X-4919-305-1	(AEP,UK,WG,IT)...PANEL ASSY, FRONT	
	X-4919-306-2	(E,EA,AUS).......PANEL ASSY, FRONT	
53	X-4919-303-1	LID (B) ASSY, CASSETTE	
54	X-4919-302-1	LID (A) ASSY, CASSETTE	
55	X-4919-301-1	KNOB (REC) ASSY	
56	4-937-331-01	KNOB (EQ)	
57	3-349-039-11	KNOB (VOL)	
58	X-3332-482-1	HOLDER ASSY, CASSETTE	
59	3-346-336-11	SPRING, TORSION	
60	3-350-146-01	BUTTON (PW)	
61	4-928-635-01	SCREW, +BV (2.6X8) TAPPING	
62	*3-343-449-01	LEVER (LOCK LEVER)	
63	3-558-708-21	WASHER, STOPPER	
64	3-312-432-00	SPRING, TENSION	
65	*3-329-997-01	LEVER (EJECT)	
66	*X-3329-913-1	BRACKET ASSY	
67	7-621-770-87	SCREW +BVTT 2.6X5 (S)	
68	7-621-255-15	SCREW +PTT 2X3 (S)	
69	*3-346-305-01	BRACKET (DAMPER)	
70	3-319-224-31	DAMPER, SMALL	
72	4-911-230-01	(E,EA,AUS)...KNOB, SLIDE	
73	*4-937-336-01	(AEP,UK,WG,IT)...HOLDER, LED	
74	*4-937-327-01	HOLDER (TC), LED	
76	4-937-318-01	BUTTON (EQ)	
77	3-350-138-01	KNOB (SLIDE)	
78	*4-923-103-01	(E,EA,AUS)...HOLDER, FL TUBE	
79	*4-921-941-21	(E,EA,AUS)...CUSHION (FL)	
80	3-682-419-21	(E,EA,AUS)...HOLDER PCB	
81	*3-703-710-41	STICKER, SONY SYMBOL (12)	
82	4-921-906-01	FELT	
83	4-921-918-01	PLATE, ORNAMENTAL	
84	4-885-182-11	SPRING, TENSION	
901	*A-4334-477-A	(E,EA,AUS)...MOUNTED PCB, PANEL	
	*A-4334-478-A	(AEP).....MOUNTED PCB, PANEL	
	*A-4334-479-A	(WG,IT)...MOUNTED PCB, PANEL	
	*A-4334-480-A	(UK)......MOUNTED PCB, PANEL	
904	*1-634-624-11	PC BOARD, H.P.	
906	*1-634-627-11	PC BOARD, TC CONTROL	
908	*1-634-625-11	(E,EA,AUS)...PC BOARD, BPF	
913	1-575-664-11	WIRE, FLAT TYPE (23 CORE)	
914	1-575-665-11	WIRE, FLAT TYPE (23 CORE)	
FL450	1-519-486-21	(E,EA,AUS)...INDICATOR TUBE, FLORESCENT	
S920	⚠1-553-318-41	SWITCH, PUSH (AC POWER)(1 KEY)(POWER)	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

4-3. MECHANISM SECTION (1)

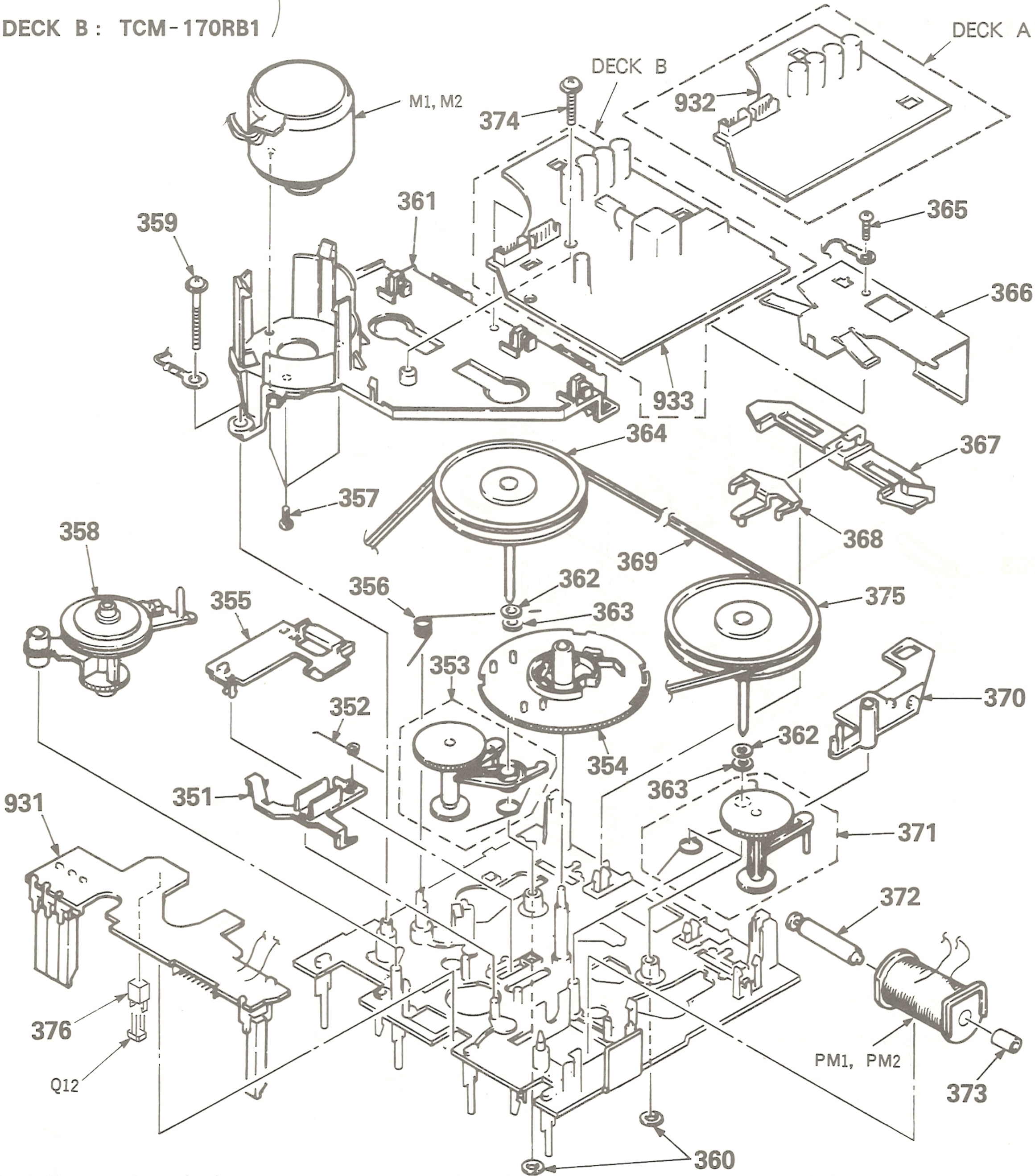
(DECK A : TCM-170RA1
DECK B : TCM-170RB1)



No.	Part No.	Description	Remarks
301	X-3343-439-1	CHASSIS ASSY, MECHANICAL	
302	3-343-477-01	SPRING, TORSION (EJECT SAFTY)	
303	3-343-476-01	LEVER (EJECT SAFETY LEVER)	
305	X-3343-456-1	LEVER (PINCH R) ASSY	
306	3-343-401-01	SPRING, TORSION	
308	3-343-439-01	CAP (REEL TABLE)	
309	X-3343-415-1	TABEL (REV) ASSY, REEL	
310	X-3343-401-1	TABEL ASSY, REEL	
311	3-343-420-01	SPRING, LEAF	
312	3-343-411-01	GEAR (FF GEAR)	
313	X-3343-455-1	LEVER (PINCH F) ASSY	
314	3-343-487-01	WASHER	
315	3-355-802-01	WASHER	
HP1	A-2108-122-C	(DECK A)...CHASSIS ASSY, HEAD (PB)	
HRPE1	A-2108-123-C	(DECK B)...CHASSIS ASSY, HEAD (REC/PB/ERASE)	

4-4. MECHANISM SECTION (2)

(DECK A : TCM-170RA1
DECK B : TCM-170RB1)


DECK A
DECK B
932
374
M1, M2
361
365
359
366
933
364
367
357
358
368
369
356
362
355
363
375
353
370
352
362
354
363
931
351
371
372
376
Q12
PM1, PM2
373
360

No.	Part No.	Description	Remarks
351	3-343-453-01	SLIDER (BRAKE PLATE)	
352	3-343-429-01	SPRING, TORSION	
353	X-3343-454-1	LEVER (TU-R) ASSY	
354	3-343-470-01	GEAR (CAM GEAR)	
355	3-343-461-01	SLIDER	
356	3-343-430-01	SPRING, TORSION	
357	7-627-556-28	SCREW +P 2.6X3.5	
358	X-3343-414-1	LAVER (FR ARM) ASSY	
359	3-355-801-01	SCREW (BTP 2X18)	
360	3-343-473-01	WASHER, NYLON	
361	*X-3343-407-1	BASE (THRUST RETAINER) ASSY	
362	4-605-835-11	WASHER (2.6), POLYSLIDER	
363	3-307-482-00	WASHER, LUMILER	
364	X-3343-416-7	FLYWHEEL (REV) COMPLETE ASSY	
365	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT	
366	3-343-480-01	PLATE, SHIELD	
367	3-343-457-01	SLIDER (REVERSE SLIDER)	
368	3-343-462-01	LEVER	
369	3-343-426-02	BELT (CAPSTAN BELT SQUARE)	
370	3-343-493-01	LEVER (PM LEVER)	
371	X-3343-453-1	LEVER (TU-F) ASSY	
372	*3-343-425-01	ARBOR (MOVABLE IRON ARBOR), IRON	
373	*3-343-424-01	ARBOR (FIXED IRON ARBOR), IRON	
374	3-343-404-01	SCREW (PTPWH 2X12)	
375	X-3343-429-1	FLYWHEEL COMPLETE ASSY	
376	3-343-419-01	HOLDER (S SENSER A)	
931	*1-624-148-11	PC BOARD, LEAF SW	
932	*1-624-147-11	PC BOARD, MD-A	
933	*1-624-146-11	PC BOARD, MD-B	
M1	X-3343-447-1	(DECK A)...REEL/CAPSTAN MOTOR ASSY	
M2	X-3343-447-1	(DECK B)...REEL/CAPSTAN MOTOR ASSY	
PM1	1-454-456-11	(DECK A)...SOLENOID, PLUNGER	
PM2	1-454-456-11	(DECK B)...SOLENOID, PLUNGER	

SECTION 5
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA...,
UPC...: μPC, UPD...: μPD...

- Mark "E, (E3) Model" is used as mark "E, (E3) and Australia Model".

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- WG : West Gremany model
- IT : Italian model
- EA : Saudi Arabia model
- AUS : Australian model
- E2 : E model with turntable system
- E3 : E model without turntable system

Ref.No.	Part No.	Description			
901	*A-4334-477-A	(E,EA,AUS)...MOUNTED PCB, PANEL			
	*A-4334-478-A	(AEP).........MOUNTED PCB, PANEL			
	*A-4334-479-A	(WG,IT)......MOUNTED PCB, PANEL			
	*A-4334-480-A	(UK).........MOUNTED PCB, PANEL			
902	*A-4334-486-A	(E3,EA,AUS)...MOUNTED PCB, MAIN			
	*A-4334-487-A	(AEP).........MOUNTED PCB, MAIN			
	*A-4334-488-A	(WG,IT).......MOUNTED PCB, MAIN			
	*A-4334-489-A	(UK)..........MOUNTED PCB, MAIN			
	*A-4334-535-A	(E2)..........MOUNTED PCB, MAIN			
903	*A-4334-823-A	(AEP,UK)...MOUNTED PCB, POWER AMPLIFIER			
	*A-4334-824-A	(WG,IT)....MOUNTED PCB, POWER AMPLIFIER			
	*A-4334-828-A	(E,EA,AUS) ...MOUNTED PCB, POWER AMPLIFIER			
904	*1-634-624-11	PC BOARD, H.P.			
905	*1-634-626-11	PC BOARD, POWER (P)			
906	*1-634-627-11	PC BOARD, TC CONTROL			
907	*1-634-630-11	PC BOARD, POWER (S)			
908	*1-634-625-11	(E,EA,AUS)...PC BOARD, BPF			
909	1-533-213-31	HOLDER, FUSE			
910	⚠1-575-654-11	(AEP,WG,IT,EA)...CORD, POWER			
	⚠1-575-656-11	(E,AUS)..........CORD, POWER			
	⚠1-575-669-21	(UK).............CORD, POWER			
911	⚠1-569-007-11	(E,AUS)...ADAPTOR, CONVERSION 2P			
912	⚠1-569-008-11	(EA)...ADAPTOR, CONVERSION 2P			
913	1-575-664-11	WIRE, FLAT TYPE (23 CORE)			
914	1-575-665-11	WIRE, FLAT TYPE (23 CORE)			
931	*1-624-148-11	PC BOARD, LEAF SW			
932	*1-624-147-11	PC BOARD, MD-A			
933	*1-624-146-11	PC BOARD, MD-B			
C48A	1-162-217-31	CERAMIC	56PF	5%	50V
C48B	1-162-217-31	CERAMIC	56PF	5%	50V
C61A	1-162-289-31	CERAMIC	390PF	10%	50V
C61B	1-162-289-31	CERAMIC	390PF	10%	50V
C62A	1-136-157-00	FILM	0.022MF	5%	50V
C62B	1-136-157-00	FILM	0.022MF	5%	50V
C63A	1-124-282-00	ELECT	22MF	20%	25V
C63B	1-124-282-00	ELECT	22MF	20%	25V
C64	1-162-288-31	CERAMIC	330PF	10%	50V
C65	1-136-273-91	FILM	75PF	5%	630V
C67	1-162-217-31	CERAMIC	56PF	5%	50V
C68A	1-162-217-31	CERAMIC	56PF	5%	50V
C68B	1-162-217-31	CERAMIC	56PF	5%	50V
C81A	1-126-101-11	ELECT	100MF	20%	16V
C81B	1-126-101-11	ELECT	100MF	20%	16V
C82A	1-126-101-11	ELECT	100MF	20%	16V
C82B	1-126-101-11	ELECT	100MF	20%	16V
C83	1-124-791-11	ELECT	1MF	20%	50V
C84	1-124-925-11	ELECT	2.2MF	20%	50V
C85	1-130-477-00	MYLAR	0.0033MF	5%	50V
C86	1-130-475-00	MYLAR	0.0022MF	5%	50V
C87	1-130-475-00	MYLAR	0.0022MF	5%	50V
C88	1-136-562-11	FILM	0.0082MF	5%	630V
C89	1-161-494-00	CERAMIC	0.022MF		25V
C101	1-126-161-11	ELECT	2.2MF	20%	50V
C102	1-162-282-31	CERAMIC	100PF	10%	50V
C103	1-126-022-11	ELECT	47MF	20%	16V
C105	1-162-219-31	CERAMIC	68PF	5%	50V
C106	1-130-480-00	MYLAR	0.0056MF	5%	50V
C107	1-130-473-00	MYLAR	0.0015MF	5%	50V
C108	1-124-045-00	ELECT	4.7MF	20%	50V
C109	1-124-464-11	ELECT	0.22MF	20%	50V
C110	1-126-161-11	ELECT	2.2MF	20%	50V
C112	1-126-161-11	ELECT	2.2MF	20%	50V
C131	1-126-161-11	ELECT	2.2MF	20%	50V
C132	1-162-219-31	CERAMIC	68PF	5%	50V
C133	1-162-207-31	CERAMIC	22PF	5%	50V
C134	1-126-059-11	ELECT	10MF	20%	50V
C135	1-126-022-11	ELECT	47MF	20%	16V
C136	1-126-161-11	ELECT	2.2MF	20%	50V
C137	1-162-219-31	CERAMIC	68PF	5%	50V
C138	1-162-282-31	CERAMIC	100PF	10%	50V
C139	1-124-261-00	ELECT	10MF	20%	50V
C141	1-124-465-00	ELECT	0.47MF	20%	50V
C142	1-136-834-11	FILM	0.047MF	5%	50V
C143	1-110-342-11	MYLAR	390PF	5%	50V
C144	1-130-472-00	MYLAR	0.0012MF	5%	50V
C145	1-130-478-00	MYLAR	0.0039MF	5%	50V
C146	1-136-154-00	FILM	0.012MF	5%	50V
C147	1-136-835-11	FILM	0.056MF	5%	50V
C148	1-130-481-00	MYLAR	0.0068MF	5%	50V
C149	1-136-157-00	FILM	0.022MF	5%	50V
C150	1-136-741-11	FILM	0.068MF	5%	50V
C151	1-124-464-11	ELECT	0.22MF	20%	50V
C152	1-124-465-00	ELECT	0.47MF	20%	50V
C153	1-162-282-31	CERAMIC	100PF	10%	50V
C154	1-124-261-00	ELECT	10MF	20%	50V
C155	1-124-589-11	ELECT	47MF	20%	16V
C156	1-124-589-11	ELECT	47MF	20%	16V

Ref.No.	Part No.	Description			
C157	1-124-963-11	ELECT	33MF	20%	16V
C158	1-124-963-11	ELECT	33MF	20%	16V
C171	1-126-059-11	ELECT	10MF	20%	50V
C172	1-162-286-31	CERAMIC	220PF	10%	50V
C173	1-124-443-00	ELECT	100MF	20%	6.3V
C174	1-162-286-31	CERAMIC	220PF	10%	50V
C175	1-124-910-11	ELECT	47MF	20%	50V
C176	1-124-122-11	ELECT	100MF	20%	50V
C177	1-136-742-11	FILM	0.1MF	5%	50V
C178	1-126-233-11	ELECT	22MF	20%	50V
C179	1-136-741-11	FILM	0.068MF	5%	50V
C180	1-136-741-11	FILM	0.068MF	5%	50V
C181	1-162-211-31	CERAMIC	33PF	5%	50V
C191	1-124-443-00	ELECT	100MF	20%	6.3V
C192	1-124-587-11	ELECT	220MF	20%	6.3V
C193	1-124-587-11	ELECT	220MF	20%	6.3V
C201	1-126-161-11	ELECT	2.2MF	20%	50V
C202	1-162-282-31	CERAMIC	100PF	10%	50V
C203	1-126-022-11	ELECT	47MF	20%	16V
C205	1-162-219-31	CERAMIC	68PF	5%	50V
C206	1-130-480-00	MYLAR	0.0056MF	5%	50V
C207	1-130-473-00	MYLAR	0.0015MF	5%	50V
C208	1-124-045-00	ELECT	4.7MF	20%	50V
C209	1-124-464-11	ELECT	0.22MF	20%	50V
C210	1-126-161-11	ELECT	2.2MF	20%	50V
C212	1-126-161-11	ELECT	2.2MF	20%	50V
C231	1-126-161-11	ELECT	2.2MF	20%	50V
C232	1-162-219-31	CERAMIC	68PF	5%	50V
C233	1-162-207-31	CERAMIC	22PF	5%	50V
C234	1-126-059-11	ELECT	10MF	20%	50V
C235	1-126-022-11	ELECT	47MF	20%	16V
C236	1-126-161-11	ELECT	2.2MF	20%	50V
C237	1-162-219-31	CERAMIC	68PF	5%	50V
C238	1-162-282-31	CERAMIC	100PF	10%	50V
C239	1-126-157-11	ELECT	10MF	20%	50V
C241	1-124-465-00	ELECT	0.47MF	20%	50V
C242	1-136-834-11	FILM	0.047MF	5%	50V
C243	1-110-342-11	MYLAR	390PF	5%	50V
C244	1-130-472-00	MYLAR	0.0012MF	5%	50V
C245	1-130-478-00	MYLAR	0.0039MF	5%	50V
C246	1-136-154-00	FILM	0.012MF	5%	50V
C247	1-136-835-11	FILM	0.056MF	5%	50V
C248	1-130-481-00	MYLAR	0.0068MF	5%	50V
C249	1-136-157-00	FILM	0.022MF	5%	50V
C250	1-136-741-11	FILM	0.068MF	5%	50V
C251	1-124-464-11	ELECT	0.22MF	20%	50V
C252	1-124-465-00	ELECT	0.47MF	20%	50V
C253	1-162-282-31	CERAMIC	100PF	10%	50V
C254	1-126-157-11	ELECT	10MF	20%	50V
C255	1-124-589-11	ELECT	47MF	20%	16V
C256	1-124-589-11	ELECT	47MF	20%	16V
C271	1-123-875-11	ELECT	10MF	20%	50V
C272	1-162-286-31	CERAMIC	220PF	10%	50V
C273	1-124-443-00	ELECT	100MF	20%	6.3V
C274	1-162-286-31	CERAMIC	220PF	10%	50V
C275	1-124-910-11	ELECT	47MF	20%	50V
C276	1-124-122-11	ELECT	100MF	20%	50V

Ref.No.	Part No.	Description			
C277	1-136-742-11	FILM	0.1MF	5%	50V
C279	1-136-741-11	FILM	0.068MF	5%	50V
C280	1-136-741-11	FILM	0.068MF	5%	50V
C281	1-162-211-31	CERAMIC	33PF	5%	50V
C301	1-125-486-11	DOUBLE LAYERS	0.22F		5.5V
C302	1-136-742-11	FILM	0.1MF	5%	50V
C303	1-161-494-00	CERAMIC	0.022MF		25V
C304	1-161-494-00	CERAMIC	0.022MF		25V
C305	1-126-157-11	ELECT	10MF	20%	50V
C310	1-164-159-11	CERAMIC	0.1MF		50V
C350	1-161-494-00	CERAMIC	0.022MF		25V
C398	1-162-294-11	CERAMIC	0.001MF	10%	50V
C399	1-162-294-11	CERAMIC	0.001MF	10%	50V
C401	1-124-925-11	ELECT	2.2MF	20%	50V
C402	1-162-294-31	CERAMIC	0.001MF	10%	50V
C403	1-162-284-31	CERAMIC	150PF	10%	50V
C404	1-162-219-31	CERAMIC	68PF	5%	50V
C405	1-124-464-11	ELECT	0.22MF	20%	50V
C409	1-126-022-11	ELECT	47MF	20%	16V
C410	1-126-022-11	ELECT	47MF	20%	16V
C451	1-161-374-11	(E,EA,AUS)...CERAMIC	0.0015MF	30%	16V
C452	1-124-234-00	(E,EA,AUS)...ELECT	22MF	20%	16V
C453	1-124-234-00	(E,EA,AUS)...ELECT	22MF	20%	16V
C454	1-126-177-11	(E,EA,AUS)...ELECT	100MF	20%	6.3V
C455	1-161-494-00	(E,EA,AUS)...CERAMIC	0.022MF		25V
C470	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C471	1-162-219-31	(E,EA,AUS)...CERAMIC	68PF	5%	50V
C472	1-126-233-11	(E,EA,AUS)...ELECT	22MF	20%	50V
C473	1-162-219-31	(E,EA,AUS)...CERAMIC	68PF	5%	50V
C474	1-130-477-11	(E,EA,AUS)...MYLAR	0.0033MF	5%	50V
C475	1-130-477-11	(E,EA,AUS)...MYLAR	0.0033MF	5%	50V
C476	1-126-233-11	(E,EA,AUS)...ELECT	22MF	20%	50V
C477	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C478	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C479	1-162-219-31	(E,EA,AUS)...CERAMIC	68PF	5%	50V
C480	1-130-477-11	(E,EA,AUS)...MYLAR	0.0033MF	5%	50V
C481	1-130-477-11	(E,EA,AUS)...MYLAR	0.0033MF	5%	50V
C482	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C483	1-162-219-31	(E,EA,AUS)...CERAMIC	68PF	5%	50V
C484	1-136-153-00	(E,EA,AUS)...MYLAR	0.01MF	5%	50V
C485	1-136-153-00	(E,EA,AUS)...MYLAR	0.01MF	5%	50V
C486	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C487	1-162-219-31	(E,EA,AUS)...CERAMIC	68PF	5%	50V
C488	1-130-477-11	(E,EA,AUS)...MYLAR	0.0033MF	5%	50V
C489	1-130-477-11	(E,EA,AUS)...MYLAR	0.0033MF	5%	50V
C490	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C491	1-162-219-31	(E,EA,AUS)...CERAMIC	68PF	5%	50V
C492	1-136-158-00	(E,EA,AUS)...MYLAR	0.027MF	5%	50V
C493	1-136-158-00	(E,EA,AUS)...MYLAR	0.027MF	5%	50V
C494	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C495	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C501	1-136-158-00	FILM	0.027MF	5%	50V
C502	1-124-902-00	(E,EA,AUS).......ELECT	33MF	20%	16V
C502	1-126-300-11	(AEP,UK,WG,IT)...ELECT	0.47MF	20%	50V
C503	1-124-045-00	ELECT	4.7MF	20%	50V
C504	1-126-059-11	ELECT	10MF	20%	50V

Ref.No.	Part No.	Description
C505	1-124-902-00	(E,EA,AUS).......ELECT 33MF 20% 16V
C505	1-126-300-11	(AEP,UK,WG,IT)...ELECT 0.47MF 20% 50V
C506	1-126-059-11	(AEP,UK,WG,IT)...ELECT 10MF 20% 50V
C507	1-126-059-11	(AEP,UK,WG,IT)...ELECT 10MF 20% 50V
C508	1-126-161-11	(AEP,UK,WG,IT)...ELECT 2.2MF 20% 50V
C509	1-124-261-00	ELECT 10MF 20% 50V
C510	1-124-261-00	ELECT 10MF 20% 50V
C551	1-136-158-00	FILM 0.027MF 5% 50V
C552	1-124-300-11	(AEP,UK,WG,IT)...ELECT 0.47MF 20% 50V
C552	1-124-902-00	(E,EA,AUS).......ELECT 33MF 20% 16V
C553	1-124-045-00	ELECT 4.7MF 20% 50V
C554	1-126-059-11	ELECT 10MF 20% 50V
C555	1-124-902-00	(E,EA,AUS).......ELECT 33MF 20% 16V
C555	1-126-300-11	(AEP,UK,WG,IT)...ELECT 0.47MF 20% 50V
C556	1-126-059-11	ELECT 10MF 20% 50V
C557	1-126-059-11	ELECT 10MF 20% 50V
C558	1-126-161-11	ELECT 2.2MF 20% 50V
C559	1-124-261-00	ELECT 10MF 20% 50V
C601	1-123-875-11	(E,EA,AUS).......ELECT 10MF 20% 50V
C601	1-124-994-11	(AEP,UK,WG,IT)...ELECT 100MF 20% 10V
C602	1-123-875-11	(E,EA,AUS).......ELECT 10MF 20% 50V
C602	1-124-994-11	(AEP,UK,WG,IT)...ELECT 100MF 20% 10V
C603	1-131-587-11	TANTALUM 0.68MF 10% 35V
C604	1-131-587-11	TANTALUM 0.68MF 10% 35V
C605	1-126-024-11	ELECT 220MF 20% 16V
C701	1-126-161-11	ELECT 2.2MF 20% 50V
C702	1-126-161-11	ELECT 2.2MF 20% 50V
C703	1-124-994-11	ELECT 100MF 20% 10V
C704	1-161-494-00	CERAMIC 0.022MF 25V
C801	1-162-286-31	(WG,IT)...CERAMIC 220PF 10% 50V
C802	1-162-286-31	(WG,IT)...CERAMIC 220PF 10% 50V
C803	1-162-286-31	(WG,IT)...CERAMIC 220PF 10% 50V
C804	1-162-286-31	(WG,IT)...CERAMIC 220PF 10% 50V
C805	1-162-286-31	(WG,IT)...CERAMIC 220PF 10% 50V
C806	1-162-286-31	(WG,IT)...CERAMIC 220PF 10% 50V
C807	1-162-286-31	(WG,IT)...CERAMIC 220PF 10% 50V
C808	1-162-286-31	(WG,IT)...CERAMIC 220PF 10% 50V
C810	1-161-379-00	(WG,IT)...CERAMIC 0.01MF 30% 16V
C812	1-161-379-00	(WG,IT)...CERAMIC 0.01MF 30% 16V
C821	1-136-163-00	(WG,IT)...FILM 0.068MF 5% 50V
C822	1-136-163-00	(WG,IT)...FILM 0.068MF 5% 50V
C823	1-136-163-00	(WG,IT)...FILM 0.068MF 5% 50V
C824	1-136-163-00	(WG,IT)...FILM 0.068MF 5% 50V
C825	1-162-294-31	(WG,IT)...CERAMIC 0.001MF 10% 50V
C826	1-162-294-31	(WG,IT)...CERAMIC 0.001MF 10% 50V
C827	1-162-294-31	(WG,IT)...CERAMIC 0.001MF 10% 50V
C830	1-136-165-00	(WG,IT)...FILM 0.1MF 5% 50V
C831	1-136-165-00	(WG,IT)...FILM 0.1MF 5% 50V
C901	1-102-394-11	CERAMIC 0.01MF 250V
C902	1-126-224-11	(AEP,UK,WG,IT)...ELECT 4700MF 20% 42V
C902	1-126-258-11	(E,EA,AUS).......ELECT 4700MF 20% 50V
C903	1-126-224-11	(AEP,UK,WG,IT)...ELECT 4700MF 20% 42V
C903	1-126-258-11	(E,EA,AUS).......ELECT 4700MF 20% 50V

Ref.No.	Part No.	Description
C904	1-124-564-11	ELECT 4700MF 20% 25V
C905	1-124-564-11	ELECT 4700MF 20% 25V
C906	1-136-742-11	FILM 0.1MF 5% 50V
C907	1-136-742-11	FILM 0.1MF 5% 50V
C908	1-124-473-11	ELECT 1000MF 20% 10V
C909	1-136-742-11	FILM 0.1MF 5% 50V
C910	1-136-742-11	FILM 0.1MF 5% 50V
C911	1-124-473-11	ELECT 1000MF 20% 10V
C912	1-136-742-11	FILM 0.1MF 5% 50V
C913	1-136-742-11	FILM 0.1MF 5% 50V
C914	1-124-471-00	ELECT 1000MF 20% 6.3V
C915	1-136-742-11	(UK,E2)...FILM 0.1MF 5% 50V
C916	1-126-025-11	(UK)....ELECT 330MF 20% 16V
C916	1-126-103-11	(E2)....ELECT 470MF 20% 16V
C917	1-136-742-11	(E,EA,AUS)...FILM 0.1MF 5% 50V
C918	1-124-045-00	ELECT 4.7MF 20% 50V
C919	1-126-233-11	(E,EA,AUS)...ELECT 22MF 20% 50V
C920	1-161-744-00	CERAMIC 0.01MF 400V
C921	1-123-875-11	(E,EA,AUS)...ELECT 10MF 20% 50V
C922	1-102-394-11	CERAMIC 0.01MF 250V
C923	1-124-443-00	(E,EA,AUS)...ELECT 100MF 20% 6.3V
C999	1-101-004-00	CERAMIC 0.01MF 50V
CN1	1-562-327-00	SOCKET, CONNECTOR 3P
CN2	1-562-327-00	SOCKET, CONNECTOR 3P
CN3	1-562-327-00	SOCKET, CONNECTOR 3P
CN101	1-507-981-11	JACK (LARGE TYPE)(HEADPHONES)
CN102	*1-564-508-11	PLUG, CONNECTOR 5P
CN110	*1-566-856-11	SOCKET, CONNECTOR 5P (ONLY FOR ST-V502)
CN111	1-507-911-11	JACK, PIN 6P (PHONO/VIDEO/CD)
CN112	1-507-997-11	JACK, PIN 2P (SURROUND SPEAKER)
CN113	1-537-240-31	TERMINAL BOARD (CHECKER PIN)(SPEAKER)
CN114	*1-566-210-11	(UK,E2)...PIN, CONNECTOR 3P (ONLY FOR PS-V702)
CN115	*1-568-865-11	SOCKET, CONNECTOR 23P
CN116	*1-568-839-11	SOCKET, CONNECTOR 23P
CN118	*1-564-508-11	PLUG, CONNECTOR 5P
CN121	1-569-402-11	PLUG, CONNECTOR 6P
CN122	1-569-400-11	PLUG, CONNECTOR 10P
CN123	1-569-400-11	PLUG, CONNECTOR 10P
CN128	*1-564-508-11	PLUG, CONNECTOR 5P
CN131	1-569-408-11	SOCKET, CONNECTOR 6P
CN132	1-569-406-11	SOCKET, CONNECTOR 10P
CN133	1-569-406-11	SOCKET, CONNECTOR 10P
CN401	1-565-117-11	JACK, LARGE TYPE (MIC)
CN403	*1-568-451-11	(E,EA,AUS)...HOUSING, CONNECTOR (PC BOARD) 10P
CN404	*1-569-488-11	(E,EA,AUS)...PIN, CONNECTOR (PC BOARD) 10P
CN601	*1-564-340-61	PIN, CONNECTOR 6P
CN602	*1-564-339-61	PIN, CONNECTOR 5P
CN603	*1-564-339-00	PIN, CONNECTOR 5P
CN701	*1-568-865-11	SOCKET, CONNECTOR 23P
CN702	*1-568-839-11	SOCKET, CONNECTOR 23P
CN703	*1-564-342-11	PIN, CONNECTOR 8P
CN704	*1-564-342-61	PIN, CONNECTOR 8P
CN705	*1-564-337-00	PIN, CONNECTOR 3P
CN706	*1-564-337-61	PIN, CONNECTOR 3P

Ref.No.	Part No.	Description
CN707	*1-565-042-11	HOUSING, CONNECTOR (PC BOARD) 5P
CN901	*1-564-321-00	PIN, CONNECTOR 2P
CN902	*1-560-595-00	TERMINAL (WITH BASE)
CNP11A	1-564-501-11	PIN, CONNECTOR 8P
CNP11B	1-564-501-11	PIN, CONNECTOR 8P
CNP12A	*1-564-337-00	PIN, CONNECTOR 3P
CNP12B	*1-564-337-61	PIN, CONNECTOR 3P
CNP13A	*1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P
CNP13B	*1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P
CNP81A	*1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P
CNP81B	*1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P
CNP82A	*1-564-339-00	PIN, CONNECTOR 5P
CNP82B	*1-564-339-61	PIN, CONNECTOR 5P
CNP83	*1-564-340-61	PIN, CONNECTOR 6P
CP451	1-233-081-11	(E,EA,AUS)..COMPOSITION CIRCUIT BLOCK 100KX7
CP452	1-233-081-11	(E,EA,AUS)..COMPOSITION CIRCUIT BLOCK 100KX7
CP453	1-233-081-11	(E,EA,AUS)..COMPOSITION CIRCUIT BLOCK 100KX7
D11A	8-719-107-94	DIODE 1SS202-1
D11B	8-719-107-94	DIODE 1SS202-1
D81	8-719-107-94	DIODE 1SS202-1
D180	8-719-912-20	DIODE 1SS120
D190	8-719-912-20	DIODE 1SS120
D191	8-719-912-20	DIODE 1SS120
D192	8-719-912-20	DIODE 1SS120
D280	8-719-912-20	DIODE 1SS120
D301	8-719-912-20	DIODE 1SS120
D302	8-719-912-20	DIODE 1SS120
D303	8-719-912-20	DIODE 1SS120
D304	8-719-912-20	DIODE 1SS120
D305	8-719-912-20	DIODE 1SS120
D306	8-719-912-20	DIODE 1SS120
D307	8-719-912-20	DIODE 1SS120
D308	8-719-942-33	DIODE HZ3CLL
D309	8-719-912-20	DIODE 1SS120
D310	8-719-912-20	DIODE 1SS120
D311	8-719-975-60	DIODE SLP9070
D312	8-719-975-60	DIODE SLP9070
D314	8-719-975-60	DIODE SLP9070 (PHONO)
D315	8-719-975-60	DIODE SLP9070 (TUNER)
D316	8-719-975-60	DIODE SLP9070 (CD)
D317	8-719-975-60	DIODE SLP9070 (TAPE)
D318	8-719-975-60	DIODE SLP9070 (AUX)
D319	8-719-301-39	DIODE SEL2210S
D320	8-719-301-39	DIODE SEL2210S
D321	8-719-912-20	DIODE 1SS120
D322	8-719-912-20	DIODE 1SS120
D470	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
D471	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
D472	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
D473	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
D474	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
D475	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
D476	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
D477	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
D478	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
D479	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
D480	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
D481	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
D482	8-719-933-38	(E,EA,AUS)...DIODE HZS6B3L
D501	8-719-301-39	DIODE SEL2210S
D502	8-719-301-39	DIODE SEL2210S
D503	8-719-301-44	DIODE SEL2410E-D
D504	8-719-301-44	DIODE SEL2410E-D
D505	8-719-301-44	DIODE SEL2410E-D
D551	8-719-301-39	DIODE SEL2210S
D552	8-719-301-39	DIODE SEL2210S
D553	8-719-301-44	DIODE SEL2410E-D
D554	8-719-301-44	DIODE SEL2410E-D
D555	8-719-301-44	DIODE SEL2410E-D
D601	8-719-933-50	DIODE HZS7C2L
D602	8-719-933-50	DIODE HZS7C2L
D701A	8-719-200-77	DIODE 10E2N
D701B	8-719-301-39	DIODE SEL2210S
D702A	8-719-200-77	DIODE 10E2N
D702B	8-719-301-39	DIODE SEL2210S
D703A	8-719-912-20	DIODE 1SS120
D703B	8-719-301-61	DIODE SEL2910A-D
D704A	8-719-912-20	DIODE 1SS120
D704B	8-719-301-61	DIODE SEL2910A-D
D705A	8-719-912-20	DIODE 1SS120
D705B	8-719-301-44	DIODE SEL2410E-D
D706	8-719-301-61	DIODE SEL2910A-D
D707	8-719-301-61	DIODE SEL2910A-D
D708	8-719-301-44	DIODE SEL2410E-D
D709	8-719-301-61	DIODE SEL2910A-D
D710	8-719-301-39	DIODE SEL2210S
D901	8-719-302-38	DIODE RBV-602-01
D902	8-719-200-77	DIODE 10E2N
D903	8-719-200-77	DIODE 10E2N
D904	8-719-200-77	DIODE 10E2N
D905	8-719-200-77	DIODE 10E2N
D906	8-719-210-21	DIODE 11EQS04
D907	8-719-210-21	DIODE 11EQS04
D908	8-719-934-23	(E,EA,AUS)...DIODE HZS30-3L
D909	8-719-014-60	(E,EA,AUS)...DIODE UZP-5.1BB
D910	8-719-200-77	DIODE 10E2N
F901	⚠1-532-286-00	FUSE T2.5A
F902	⚠1-532-286-00	FUSE T2.5A
F920	⚠1-532-388-51	FUSE T2A
F921	⚠1-532-388-51	(E,EA,AUS)...FUSE T2A
FL450	1-519-486-21	(E,EA,AUS)..INDICATOR TUBE, FLORESCENT
HP1	A-2108-122-C	(DECK A)...CHASSIS ASSY, HEAD
HRPE1	A-2108-123-C	(DECK B)...CHASSIS ASSY, HEAD
IC81A	8-759-111-44	IC UPC4570C-1
IC81B	8-759-111-44	IC UPC4570C-1
IC101	8-759-208-06	IC TC4051BPHB
IC105	8-759-634-51	IC M5218AP
IC130	8-759-634-50	IC M5218AL

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description
IC131	8-759-634-51	IC M5218AP
IC132	8-759-000-49	IC MC14066BCP
IC133	8-759-602-04	IC M5226P
IC170	8-749-941-52	(AEP,UK,WG,IT)...IC STK4152II
IC170	8-759-111-68	(E,EA,AUS).......IC STK4192MK2
IC190	8-759-111-68	IC UPC1237HA
IC201	8-759-208-06	IC TC4051BPHB
IC233	8-759-602-04	IC M5226P
IC301	8-759-149-27	IC UPD75004CU-058
IC302	8-759-820-62	IC LB1639
IC401	8-759-634-51	IC M5218AP
IC450	8-759-820-07	(E,EA,AUS)...IC LC7566
IC470	8-759-634-51	(E,EA,AUS)...IC M5218AP
IC471	8-759-634-51	(E,EA,AUS)...IC M5218AP
IC472	8-759-634-51	(E,EA,AUS)...IC M5218AP
IC501	8-759-040-53	IC MC14053BCP
IC502	8-759-917-42	IC IR2E31A
IC551	8-759-040-53	IC MC14053BCP
IC552	8-759-917-42	IC IR2E31A
IC601	8-759-208-08	IC TC4052BPHB
IC602	8-752-033-61	IC CXA1198AP
IC603	8-752-031-67	IC CXA1100P
IC604	8-759-634-50	IC M5218AL
IC701	8-759-635-20	IC M50964-225SP
IC901	8-759-604-86	IC M5F7807
IC902	8-759-604-90	IC M5F7907
IC903	8-759-604-29	IC M5F7805
IC904	8-759-604-33	(UK,E2)...IC M5F7812
L41	1-410-780-11	INDUCTOR 27MMH
L61	1-410-780-11	INDUCTOR 27MMH
L601	1-410-521-11	INDUCTOR 100UH
L602	1-410-521-11	INDUCTOR 100UH
M1	X-3343-447-1	(DECK A)...MOTOR ASSY
M2	X-3343-447-1	(DECK B)...MOTOR ASSY
PM1	1-454-456-11	(DECK A)...SOLENOID, PLUNGER
PM2	1-454-456-11	(DECK B)...SOLENOID, PLUNGER
Q11A	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q11B	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q12A	8-719-939-23	PHOTO SENSOR GP2S09-C
Q12B	8-719-939-23	PHOTO SENSOR GP2S09-C
Q81	8-729-111-29	TRANSISTOR 2SD1616A-K
Q82	8-729-194-57	TRANSISTOR 2SC945-P
Q83	8-729-194-57	TRANSISTOR 2SC945-P
Q132	8-729-620-05	TRANSISTOR 2SC2603-EF
Q133	8-729-141-26	TRANSISTOR 2SC3622A-LK
Q180	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA
Q190	8-729-900-63	TRANSISTOR DTA124ES
Q232	8-729-620-05	TRANSISTOR 2SC2603-EF
Q233	8-729-141-26	TRANSISTOR 2SC3622A-LK
Q280	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA
Q301	8-729-620-05	TRANSISTOR 2SC2603-EF
Q302	8-729-620-05	TRANSISTOR 2SC2603-EF
Q303	8-729-900-80	TRANSISTOR DTC114ES
Q305	8-729-620-05	TRANSISTOR 2SC2603-EF
Q306	8-729-900-65	TRANSISTOR DTA114ES

Ref.No.	Part No.	Description
Q307	8-729-900-65	TRANSISTOR DTA114ES
Q308	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q501	8-729-620-05	TRANSISTOR 2SC2603-EF
Q502	8-729-620-05	TRANSISTOR 2SC2603-EF
Q504	8-729-900-80	(E,EA,AUS)...TRANSISTOR DTC114ES
Q551	8-729-620-05	TRANSISTOR 2SC2603-EF
Q552	8-729-620-05	TRANSISTOR 2SC2603-EF
Q554	8-729-900-80	(E,EA,AUS)...TRANSISTOR DTC114ES
Q601	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q701	8-729-900-61	TRANSISTOR DTA114ES
Q702	8-729-801-93	TRANSISTOR 2SD1387
Q703	8-729-801-84	TRANSISTOR 2SB1013-4
Q704	8-729-900-61	TRANSISTOR DTA114ES
Q705	8-729-801-93	TRANSISTOR 2SD1387
Q706	8-729-801-84	TRANSISTOR 2SB1013-4
Q707	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q708	8-729-118-01	TRANSISTOR 2SB1116
Q709	8-729-900-61	TRANSISTOR DTA114ES
Q710	8-729-620-05	TRANSISTOR 2SC2603-EF
Q711	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q712	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q713	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q714	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q715	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q716	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q717	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q718	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q719	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q720	8-729-900-61	TRANSISTOR DTA114ES
Q722	8-729-900-61	(E,EA,AUS)...TRANSISTOR DTA114ES
Q901	8-729-804-68	(E,EA,AUS)...TRANSISTOR 2SB1133-R
R11	1-247-834-11	CARBON 1.3K 5% 1/4W
R12	1-249-414-11	CARBON 560 5% 1/4W
R13	1-247-818-11	CARBON 300 5% 1/4W
R14A	1-249-408-11	CARBON 180 5% 1/4W
R14B	1-249-408-11	CARBON 180 5% 1/4W
R17A	1-249-437-11	CARBON 47K 5% 1/4W
R17B	1-249-437-11	CARBON 47K 5% 1/4W
R18A	1-249-437-11	CARBON 47K 5% 1/4W
R18B	1-249-437-11	CARBON 47K 5% 1/4W
R41A	1-247-881-00	CARBON 120K 5% 1/4W
R41B	1-247-881-00	CARBON 120K 5% 1/4W
R42A	1-249-405-11	CARBON 100 5% 1/4W
R42B	1-249-405-11	CARBON 100 5% 1/4W
R43A	1-247-882-11	CARBON 130K 5% 1/4W
R43B	1-247-882-11	CARBON 130K 5% 1/4W
R44A	1-249-426-11	CARBON 5.6K 5% 1/4W
R44B	1-249-426-11	CARBON 5.6K 5% 1/4W
R45	1-249-430-11	CARBON 12K 5% 1/4W
R61A	1-247-881-00	CARBON 120K 5% 1/4W
R61B	1-247-881-00	CARBON 120K 5% 1/4W
R62A	1-249-405-11	CARBON 100 5% 1/4W
R62B	1-249-405-11	CARBON 100 5% 1/4W
R63A	1-247-882-11	CARBON 130K 5% 1/4W
R63B	1-247-882-11	CARBON 130K 5% 1/4W

Ref.No.	Part No.	Description				
R64A	1-249-426-11	CARBON	5.6K	5%	1/4W	
R64B	1-249-426-11	CARBON	5.6K	5%	1/4W	
R65	1-249-430-11	CARBON	12K	5%	1/4W	
R81A	1-249-409-11	CARBON	220	5%	1/4W	
R81B	1-249-409-11	CARBON	220	5%	1/4W	
R82A	1-249-409-11	CARBON	220	5%	1/4W	
R82B	1-249-409-11	CARBON	220	5%	1/4W	
R83	1-249-429-11	CARBON	10K	5%	1/4W	
R84	⚠1-212-853-00	FUSIBLE	6.8	5%	1/4W	F
R85	1-249-434-11	CARBON	27K	5%	1/4W	
R86	1-249-434-11	CARBON	27K	5%	1/4W	
R101	1-249-417-11	CARBON	1K	5%	1/4W	
R102	1-249-441-11	CARBON	100K	5%	1/4W	
R103	1-249-441-11	CARBON	100K	5%	1/4W	
R106	1-249-437-11	CARBON	47K	5%	1/4W	
R107	1-247-897-11	CARBON	560K	5%	1/4W	
R108	1-249-416-11	CARBON	820	5%	1/4W	
R109	1-249-409-11	CARBON	220	5%	1/4W	
R110	1-249-441-11	CARBON	100K	5%	1/4W	
R111	1-249-429-11	CARBON	10K	5%	1/4W	
R112	1-247-868-11	CARBON	36K	5%	1/4W	
R113	1-249-417-11	CARBON	1K	5%	1/4W	
R114	1-247-897-11	CARBON	560K	5%	1/4W	
R115	1-249-417-11	CARBON	1K	5%	1/4W	
R116	1-247-897-11	CARBON	560K	5%	1/4W	
R131	1-249-437-11	CARBON	47K	5%	1/4W	
R132	1-249-437-11	CARBON	47K	5%	1/4W	
R133	1-249-437-11	CARBON	47K	5%	1/4W	
R134	1-249-441-11	CARBON	100K	5%	1/4W	
R135	1-249-424-11	CARBON	3.9K	5%	1/4W	
R136	1-249-429-11	CARBON	10K	5%	1/4W	
R137	1-249-426-11	CARBON	5.6K	5%	1/4W	
R138	1-249-422-11	CARBON	2.7K	5%	1/4W	
R139	1-249-422-11	CARBON	2.7K	5%	1/4W	
R140	1-249-441-11	CARBON	100K	5%	1/4W	
R141	1-249-427-11	CARBON	6.8K	5%	1/4W	
R142	1-249-412-11	CARBON	390	5%	1/4W	
R143	1-249-425-11	CARBON	4.7K	5%	1/4W	
R145	1-249-421-11	CARBON	2.2K	5%	1/4W	
R146	1-249-441-11	(E,EA,AUS)...CARBON	100K	5%	1/4W	
R147	1-249-429-11	CARBON	10K	5%	1/4W	
R148	1-249-441-11	CARBON	100K	5%	1/4W	
R149	1-249-425-11	CARBON	4.7K	5%	1/4W	
R171	1-249-417-11	CARBON	1K	5%	1/4W	
R172	1-249-438-11	CARBON	56K	5%	1/4W	
R173	1-249-414-11	CARBON	560	5%	1/4W	
R174	1-249-438-11	CARBON	56K	5%	1/4W	
R175	1-247-756-11	(AEP,UK,WG,IT)...CARBON	2.2K	5%	1/2W	
R175	1-247-758-11	(E,EA,AUS).......CARBON	3.3K	5%	1/2W	
R176	1-247-756-11	(AEP,UK,WG,IT)...CARBON	2.2K	5%	1/2W	
R176	1-247-758-11	(E,EA,AUS).......CARBON	3.3K	5%	1/2W	
R177	⚠1-212-881-11	FUSIBLE	100	5%	1/4W	F
R178	1-247-752-11	CARBON	1K	5%	1/2W	
R179	1-247-752-11	CARBON	1K	5%	1/2W	

Ref.No.	Part No.	Description				
R180	1-217-156-00	METAL PLATE	0.22	10%	5W	
R181	1-249-417-11	CARBON	1K	5%	1/4W	
R182	1-249-431-11	CARBON	15K	5%	1/4W	
R183	1-249-441-11	CARBON	100K	5%	1/4W	
R184	1-247-727-11	CARBON	10	5%	1/2W	
R186	1-249-437-11	CARBON	47K	5%	1/4W	
R187	1-247-745-11	CARBON	330	5%	1/2W	
R190	⚠1-216-431-11	(AEP,UK,WG,IT)..METAL OXIDE	560	5%	1W	F
R190	⚠1-216-432-11	(E,EA,AUS)......METAL OXIDE	820	5%	1W	F
R191	⚠1-249-486-11	(AEP,UK,WG,IT)...CARBON	12K	5%	1/2W	
R191	⚠1-249-487-11	(E,EA,AUS).......CARBON	15K	5%	1/2W	
R192	1-249-436-11	CARBON	39K	5%	1/4W	
R193	1-249-441-11	CARBON	100K	5%	1/4W	
R194	1-249-429-11	CARBON	10K	5%	1/4W	
R201	1-249-417-11	CARBON	1K	5%	1/4W	
R202	1-249-441-11	CARBON	100K	5%	1/4W	
R203	1-249-441-11	CARBON	100K	5%	1/4W	
R206	1-249-437-11	CARBON	47K	5%	1/4W	
R207	1-247-897-11	CARBON	560K	5%	1/4W	
R208	1-249-416-11	CARBON	820	5%	1/4W	
R209	1-249-409-11	CARBON	220	5%	1/4W	
R210	1-249-441-11	CARBON	100K	5%	1/4W	
R211	1-249-429-11	CARBON	10K	5%	1/4W	
R212	1-247-868-11	CARBON	36K	5%	1/4W	
R213	1-249-417-11	CARBON	1K	5%	1/4W	
R214	1-247-897-11	CARBON	560K	5%	1/4W	
R215	1-249-417-11	CARBON	1K	5%	1/4W	
R216	1-247-897-11	CARBON	560K	5%	1/4W	
R231	1-249-437-11	CARBON	47K	5%	1/4W	
R232	1-249-437-11	CARBON	47K	5%	1/4W	
R233	1-249-437-11	CARBON	47K	5%	1/4W	
R234	1-249-441-11	CARBON	100K	5%	1/4W	
R235	1-249-424-11	CARBON	3.9K	5%	1/4W	
R236	1-249-429-11	CARBON	10K	5%	1/4W	
R237	1-249-426-11	CARBON	5.6K	5%	1/4W	
R238	1-249-422-11	CARBON	2.7K	5%	1/4W	
R239	1-249-422-11	CARBON	2.7K	5%	1/4W	
R240	1-249-441-11	CARBON	100K	5%	1/4W	
R241	1-249-427-11	CARBON	6.8K	5%	1/4W	
R242	1-249-412-11	CARBON	390	5%	1/4W	
R243	1-249-425-11	CARBON	4.7K	5%	1/4W	
R245	1-249-421-11	CARBON	2.2K	5%	1/4W	
R246	1-249-441-11	(E,EA,AUS)...CARBON	100K	5%	1/4W	
R247	1-249-429-11	CARBON	10K	5%	1/4W	
R248	1-249-441-11	CARBON	100K	5%	1/4W	
R249	1-249-425-11	CARBON	4.7K	5%	1/4W	
R271	1-249-417-11	CARBON	1K	5%	1/4W	
R272	1-249-438-11	CARBON	56K	5%	1/4W	
R273	1-249-414-11	CARBON	560	5%	1/4W	
R274	1-249-438-11	CARBON	56K	5%	1/4W	
R275	1-247-756-11	(AEP,UK,WG,IT)...CARBON	2.2K	5%	1/2W	
R275	1-247-758-11	(E,EA,AUS).......CARBON	3.3K	5%	1/2W	
R276	1-247-756-11	(AEP,UK,WG,IT)...CARBON	2.2K	5%	1/2W	
R276	1-247-758-11	(E,EA,AUS).......CARBON	3.3K	5%	1/2W	
R277	⚠1-212-881-11	FUSIBLE	100	5%	1/4W	F
R280	1-217-156-00	METAL PLATE	0.22	10%	5W	
R281	1-249-417-11	CARBON	1K	5%	1/4W	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description
R282	1-249-431-11	CARBON 15K 5% 1/4W
R283	1-249-441-11	CARBON 100K 5% 1/4W
R284	1-247-727-11	CARBON 10 5% 1/2W
R286	1-249-438-11	CARBON 56K 5% 1/4W
R287	1-247-745-11	CARBON 330 5% 1/2W
R301	1-249-418-11	CARBON 1.2K 5% 1/4W
R302	1-249-429-11	CARBON 10K 5% 1/4W
R303	1-249-441-11	CARBON 100K 5% 1/4W
R304	1-249-429-11	CARBON 10K 5% 1/4W
R305	1-249-429-11	CARBON 10K 5% 1/4W
R307	1-249-433-11	CARBON 22K 5% 1/4W
R308	1-249-433-11	CARBON 22K 5% 1/4W
R309	1-249-433-11	CARBON 22K 5% 1/4W
R310	1-249-433-11	CARBON 22K 5% 1/4W
R311	1-249-409-11	CARBON 220 5% 1/4W
R312	1-249-409-11	CARBON 220 5% 1/4W
R314	1-249-411-11	CARBON 330 5% 1/4W
R315	1-249-417-11	CARBON 1K 5% 1/4W
R316	1-249-417-11	CARBON 1K 5% 1/4W
R319	1-249-429-11	(E,EA,AUS)...CARBON 10K 5% 1/4W
R320	1-249-437-11	CARBON 47K 5% 1/4W
R321	1-249-429-11	CARBON 10K 5% 1/4W
R322	1-249-409-11	CARBON 220 5% 1/4W
R323	1-249-409-11	CARBON 220 5% 1/4W
R324	1-249-409-11	(E,EA,AUS)...CARBON 220 5% 1/4W
R325	1-249-409-11	(E,EA,AUS)...CARBON 220 5% 1/4W
R329	1-249-429-11	CARBON 10K 5% 1/4W
R330	1-249-429-11	CARBON 10K 5% 1/4W
R331	1-249-429-11	CARBON 10K 5% 1/4W
R401	1-249-417-11	CARBON 1K 5% 1/4W
R402	1-249-429-11	(E,EA,AUS).......CARBON 10K 5% 1/4W
R402	1-249-441-11	(AEP,UK,WG,IT)...CARBON 100K 5% 1/4W
R403	1-249-441-11	CARBON 100K 5% 1/4W
R404	1-249-410-11	CARBON 270 5% 1/4W
R405	1-249-429-11	(AEP,UK,WG,IT)...CARBON 10K 5% 1/4W
R405	1-249-441-11	(E,EA,AUS).......CARBON 100K 5% 1/4W
R406	1-249-416-11	CARBON 820 5% 1/4W
R451	1-249-432-11	(E,EA,AUS)...CARBON 18K 5% 1/4W
R452	1-249-441-11	(E,EA,AUS)...CARBON 100K 5% 1/4W
R453	1-249-441-11	(E,EA,AUS)...CARBON 100K 5% 1/4W
R454	1-247-903-11	(E,EA,AUS)...CARBON 1M 5% 1/4W
R470	1-249-417-11	(E,EA,AUS)...CARBON 1K 5% 1/4W
R471	1-247-885-00	(E,EA,AUS)...CARBON 180K 5% 1/4W
R472	1-249-429-11	(E,EA,AUS)...CARBON 10K 5% 1/4W
R473	1-249-405-11	(E,EA,AUS)...CARBON 100 5% 1/4W
R474	1-249-412-11	(E,EA,AUS)...CARBON 390 5% 1/4W
R475	1-249-423-11	(E,EA,AUS)...CARBON 3.3K 5% 1/4W
R476	1-249-439-11	(E,EA,AUS)...CARBON 68K 5% 1/4W
R477	1-247-899-11	(E,EA,AUS)...CARBON 680K 5% 1/4W
R478	1-247-903-11	(E,EA,AUS)...CARBON 1M 5% 1/4W
R480	1-249-441-11	(E,EA,AUS)...CARBON 100K 5% 1/4W
R481	1-249-439-11	(E,EA,AUS)...CARBON 68K 5% 1/4W
R482	1-249-426-11	(E,EA,AUS)...CARBON 5.6K 5% 1/4W
R483	1-249-413-11	(E,EA,AUS)...CARBON 470 5% 1/4W
R484	1-247-901-11	(E,EA,AUS)...CARBON 820K 5% 1/4W
R485	1-249-440-11	(E,EA,AUS)...CARBON 82K 5% 1/4W
R486	1-249-423-11	(E,EA,AUS)...CARBON 3.3K 5% 1/4W
R487	1-249-441-11	(E,EA,AUS)...CARBON 100K 5% 1/4W
R488	1-249-441-11	(E,EA,AUS)...CARBON 100K 5% 1/4W
R489	1-247-887-00	(E,EA,AUS)...CARBON 220K 5% 1/4W
R490	1-249-433-11	(E,EA,AUS)...CARBON 22K 5% 1/4W
R491	1-249-417-11	(E,EA,AUS)...CARBON 1K 5% 1/4W
R492	1-247-903-11	(E,EA,AUS)...CARBON 1M 5% 1/4W
R493	1-249-441-11	(E,EA,AUS)...CARBON 100K 5% 1/4W
R494	1-249-423-11	(E,EA,AUS)...CARBON 3.3K 5% 1/4W
R495	1-249-441-11	(E,EA,AUS)...CARBON 100K 5% 1/4W
R496	1-249-441-11	(E,EA,AUS)...CARBON 100K 5% 1/4W
R497	1-249-417-11	(E,EA,AUS)...CARBON 1K 5% 1/4W
R498	1-249-441-11	(E,EA,AUS)...CARBON 100K 5% 1/4W
R499	1-249-409-11	(E,EA,AUS)...CARBON 220 5% 1/4W
R501	1-249-420-11	CARBON 1.8K 5% 1/4W
R502	1-249-437-11	CARBON 47K 5% 1/4W
R503	1-249-422-11	CARBON 2.7K 5% 1/4W
R504	1-249-441-11	CARBON 100K 5% 1/4W
R506	1-249-408-11	(E,EA,AUS)...CARBON 180 5% 1/4W
R507	1-247-850-11	(E,EA,AUS).......CARBON 6.2K 5% 1/4W
R507	1-249-419-11	(AEP,UK,WG,IT)...CARBON 1.5K 5% 1/4W
R508	1-249-421-11	CARBON 2.2K 5% 1/4W
R509	1-249-425-11	CARBON 4.7K 5% 1/4W
R510	1-249-429-11	CARBON 10K 5% 1/4W
R511	1-249-411-11	CARBON 330 5% 1/4W
R512	1-249-426-11	CARBON 5.6K 5% 1/4W
R513	1-249-425-11	CARBON 4.7K 5% 1/4W
R514	1-249-429-11	CARBON 10K 5% 1/4W
R515	1-249-421-11	CARBON 2.2K 5% 1/4W
R516	1-249-440-11	CARBON 82K 5% 1/4W
R520	1-249-437-11	CARBON 47K 5% 1/4W
R521	1-247-854-11	CARBON 9.1K 5% 1/4W
R522	1-249-407-11	CARBON 150 5% 1/4W
R551	1-249-420-11	CARBON 1.8K 5% 1/4W
R552	1-249-437-11	CARBON 47K 5% 1/4W
R553	1-249-422-11	CARBON 2.7K 5% 1/4W
R554	1-249-441-11	CARBON 100K 5% 1/4W
R556	1-249-408-11	(E,EA,AUS)...CARBON 180 5% 1/4W
R557	1-247-850-11	(E,EA,AUS).......CARBON 6.2K 5% 1/4W
R557	1-249-419-11	(AEP,UK,WG,IT)...CARBON 1.5K 5% 1/4W
R558	1-249-421-11	CARBON 2.2K 5% 1/4W
R559	1-249-425-11	CARBON 4.7K 5% 1/4W
R560	1-249-429-11	CARBON 10K 5% 1/4W
R561	1-249-411-11	CARBON 330 5% 1/4W
R562	1-249-426-11	CARBON 5.6K 5% 1/4W
R563	1-249-425-11	CARBON 4.7K 5% 1/4W
R564	1-249-429-11	CARBON 10K 5% 1/4W
R565	1-249-421-11	CARBON 2.2K 5% 1/4W
R566	1-249-440-11	CARBON 82K 5% 1/4W
R570	1-249-437-11	CARBON 47K 5% 1/4W
R571	1-247-854-11	CARBON 9.1K 5% 1/4W
R601	1-249-433-11	CARBON 22K 5% 1/4W
R602	1-249-433-11	CARBON 22K 5% 1/4W
R603	1-249-433-11	CARBON 22K 5% 1/4W
R604	1-215-460-00	METAL 43K 1% 1/6W

Ref.No.	Part No.	Description
R605	1-249-437-11	CARBON 47K 5% 1/4W
R606	1-249-437-11	CARBON 47K 5% 1/4W
R609	1-247-864-11	CARBON 24K 5% 1/4W
R611	1-249-437-11	CARBON 47K 5% 1/4W
R612	1-249-435-11	CARBON 33K 5% 1/4W
R613	1-247-868-11	CARBON 36K 5% 1/4W
R614	1-247-878-00	CARBON 91K 5% 1/4W
R615	1-247-881-00	CARBON 120K 5% 1/4W
R616	1-249-437-11	CARBON 47K 5% 1/4W
R617	1-247-862-11	CARBON 20K 5% 1/4W
R618	1-247-868-11	CARBON 36K 5% 1/4W
R619	1-249-436-11	CARBON 39K 5% 1/4W
R620	1-247-876-11	CARBON 75K 5% 1/4W
R621	1-247-868-11	CARBON 36K 5% 1/4W
R622	1-247-878-00	CARBON 91K 5% 1/4W
R623	1-247-876-11	CARBON 75K 5% 1/4W
R624	1-249-437-11	CARBON 47K 5% 1/4W
R625	1-247-866-11	CARBON 30K 5% 1/4W
R626	1-247-878-00	CARBON 91K 5% 1/4W
R627	1-247-881-00	CARBON 120K 5% 1/4W
R628	1-247-876-11	CARBON 75K 5% 1/4W
R629	1-247-868-11	CARBON 36K 5% 1/4W
R630	1-249-438-11	CARBON 56K 5% 1/4W
R631	1-249-433-11	CARBON 22K 5% 1/4W
R632	1-249-434-11	CARBON 27K 5% 1/4W
R633	1-249-440-11	CARBON 82K 5% 1/4W
R634	1-249-440-11	CARBON 82K 5% 1/4W
R635	1-249-429-11	CARBON 10K 5% 1/4W
R636	1-249-429-11	CARBON 10K 5% 1/4W
R637	1-249-425-11	CARBON 4.7K 5% 1/4W
R638	1-247-854-11	CARBON 9.1K 5% 1/4W
R639	1-249-433-11	CARBON 22K 5% 1/4W
R640	1-249-433-11	CARBON 22K 5% 1/4W
R641	1-249-405-11	CARBON 100 5% 1/4W
R642	1-249-405-11	CARBON 100 5% 1/4W
R703	1-249-421-11	CARBON 2.2K 5% 1/4W
R704	1-249-429-11	CARBON 10K 5% 1/4W
R705	1-249-417-11	CARBON 1K 5% 1/4W
R706	1-249-429-11	CARBON 10K 5% 1/4W
R707	1-249-437-11	CARBON 47K 5% 1/4W
R708	1-249-433-11	CARBON 22K 5% 1/4W
R709	1-249-429-11	CARBON 10K 5% 1/4W
R712	1-249-421-11	CARBON 2.2K 5% 1/4W
R713	1-249-429-11	CARBON 10K 5% 1/4W
R714	1-249-417-11	CARBON 1K 5% 1/4W
R715	1-249-429-11	CARBON 10K 5% 1/4W
R716	1-249-437-11	CARBON 47K 5% 1/4W
R717	1-249-417-11	CARBON 1K 5% 1/4W
R718	1-249-417-11	CARBON 1K 5% 1/4W
R719	1-249-425-11	CARBON 4.7K 5% 1/4W
R720	1-249-425-11	CARBON 4.7K 5% 1/4W
R723	1-247-895-00	CARBON 470K 5% 1/4W
R724	1-247-895-00	CARBON 470K 5% 1/4W
R727	1-249-429-11	CARBON 10K 5% 1/4W
R728	1-247-903-00	CARBON 1M 5% 1/4W
R729	1-249-429-11	CARBON 10K 5% 1/4W
R730	1-249-423-11	CARBON 3.3K 5% 1/4W

Ref.No.	Part No.	Description
R731	1-249-429-11	CARBON 10K 5% 1/4W
R732	1-249-421-11	CARBON 2.2K 5% 1/4W
R733	1-249-421-11	CARBON 2.2K 5% 1/4W
R734	1-249-421-11	CARBON 2.2K 5% 1/4W
R737	1-249-429-11	CARBON 10K 5% 1/4W
R738	1-249-429-11	(AEP,UK,WG,IT)...CARBON 10K 5% 1/4W
R738	1-249-441-11	(E,EA,AUS).......CARBON 100K 5% 1/4W
R739	1-249-429-11	(AEP,UK,WG,IT)...CARBON 10K 5% 1/4W
R739	1-249-441-11	(E,EA,AUS).......CARBON 100K 5% 1/4W
R740	1-249-409-11	CARBON 220 5% 1/4W
R741	1-249-409-11	CARBON 220 5% 1/4W
R742	1-249-411-11	CARBON 330 5% 1/4W
R743	1-249-411-11	CARBON 330 5% 1/4W
R744	1-249-411-11	CARBON 330 5% 1/4W
R745	1-249-411-11	CARBON 330 5% 1/4W
R746	1-249-411-11	CARBON 330 5% 1/4W
R747	1-249-411-11	CARBON 330 5% 1/4W
R748	1-249-411-11	CARBON 330 5% 1/4W
R749	1-249-411-11	CARBON 330 5% 1/4W
R750	1-249-412-11	CARBON 390 5% 1/4W
R751	1-249-411-11	CARBON 330 5% 1/4W
R752	1-249-429-11	CARBON 10K 5% 1/4W
R753	1-249-429-11	CARBON 10K 5% 1/4W
R774	1-249-424-11	CARBON 3.9K 5% 1/4W
R775	1-249-420-11	CARBON 1.8K 5% 1/4W
R776	1-249-417-11	CARBON 1K 5% 1/4W
R777	1-247-832-11	CARBON 1.1K 5% 1/4W
R778	1-249-411-11	CARBON 330 5% 1/4W
R779	1-249-412-11	CARBON 390 5% 1/4W
R780	1-249-407-11	CARBON 150 5% 1/4W
R781	1-249-409-11	CARBON 220 5% 1/4W
R782	1-249-411-11	CARBON 330 5% 1/4W
R783	1-249-413-11	CARBON 470 5% 1/4W
R784	1-249-415-11	CARBON 680 5% 1/4W
R785	1-249-417-11	CARBON 1K 5% 1/4W
R786	1-249-426-11	CARBON 5.6K 5% 1/4W
R787	1-249-430-11	CARBON 12K 5% 1/4W
R801	1-247-417-11	(WG,IT)...CARBON 1K 5% 1/4W
R802	1-247-417-11	(WG,IT)...CARBON 1K 5% 1/4W
R821	1-247-727-11	(WG,IT)...CARBON 10 5% 1/4W
R822	1-247-727-11	(WG,IT)...CARBON 10 5% 1/4W
R901	1-247-864-11	(AEP,UK,WG,IT)...CARBON 24K 5% 1/4W
R901	1-249-434-11	(E,EA,AUS).......CARBON 27K 5% 1/4W
R903	1-249-422-11	(E,EA,AUS)...CARBON 2.7K 5% 1/4W
R904	1-249-426-11	(E,EA,AUS)...CARBON 5.6K 5% 1/4W
R905	1-249-429-11	(E,EA,AUS)...CARBON 10K 5% 1/4W
RV41A	1-228-989-00	RES, ADJ, CARBON 470
RV41B	1-228-989-00	RES, ADJ, CARBON 470
RV42	1-230-499-11	RES, ADJ, CARBON 100K
RV61A	1-228-989-00	RES, ADJ, CARBON 470
RV61B	1-228-989-00	RES, ADJ, CARBON 470
RV62	1-230-499-11	RES, ADJ, CARBON 100K

Ref.No.	Part No.	Description
RV131	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (L 100Hz)(INCLUDING LED)
RV131	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (L 100Hz)
RV132	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (L 400Hz)(INCLUDING LED)
RV132	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (L 400Hz)
RV133	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (L 1kHz) (INCLUDING LED)
RV133	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (L 1kHz)
RV134	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (L 4kHz) (INCLUDING LED)
RV134	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (L 4kHz)
RV135	1-241-011-11	(E,EA,AUS)...RES, VAR, SLIDE 100K (L 12kHz)(INCLUDING LED)
RV135	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (L 12kHz)
RV149	1-241-014-11	RES, VAR, CARBON 20K/20K (DBFB (SAT) LEVEL)
RV150	1-241-014-11	RES, VAR, CARBON 20K/20K (SURROUND LEVEL)
RV151	1-241-016-11	RES, VAR, CARBON 100K (BALANCE)
RV152	1-241-013-11	RES, VAR, CARBON 100K/100K (VOLUME)
RV231	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (R 100Hz)(INCLUDING LED)
RV231	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (R 100Hz)
RV232	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (R 400Hz)(INCLUDING LED)
RV232	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (R 400Hz)
RV233	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (R 1kHz) (INCLUDING LED)
RV233	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (R 1kHz)
RV234	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (R 4kHz) (INCLUDING LED)
RV234	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (R 4kHz)
RV235	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (R 12kHz)(INCLUDING LED)
RV235	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (R 12kHz)
RV401	1-241-015-11	RES, VAR, CARBON 50K (MIC LEVEL)
RV501	1-228-994-00	RES, ADJ, CARBON 10K
RV551	1-228-994-00	RES, ADJ, CARBON 10K
RV601	1-238-534-11	RES, VAR, CARBON 20K/20K (REC LEVEL)
RY81	1-515-614-11	RELAY
RY190	1-515-533-11	RELAY
S11A	1-571-281-21	SWITCH, LEAF (HALF)
S11B	1-571-281-21	SWITCH, LEAF (HALF)

Ref.No.	Part No.	Description
S12	1-571-281-21	SWITCH, LEAF (REC A)
S13	1-571-281-21	SWITCH, LEAF (REC B)
S14A	1-571-281-21	SWITCH, LEAF (CrO2)
S14B	1-571-281-21	SWITCH, LEAF (CrO2)
S101	1-572-334-11	SWITCH, PUSH (2 KEY)(EQ ON/EQ REC)
S301	1-554-303-21	SWITCH, KEY BOARD (PHONO)
S302	1-554-303-21	SWITCH, KEY BOARD (TUNER)
S303	1-554-303-21	SWITCH, KEY BOARD (CD)
S304	1-554-303-21	SWITCH, KEY BOARD (TAPE)
S305	1-554-303-21	SWITCH, KEY BOARD (AUX)
S306	1-554-303-21	SWITCH, KEY BOARD (SURROUND)
S307	1-554-303-21	SWITCH, KEY BOARD (DBFB (SAT))
S701	1-554-303-21	SWITCH, KEY BOARD (HIGH SPEED)
S702	1-554-303-21	SWITCH, KEY BOARD (NORMAL SPEED)
S703	1-554-303-21	SWITCH, KEY BOARD (A FWD)
S704	1-554-303-21	SWITCH, KEY BOARD (A REV)
S705	1-554-303-21	SWITCH, KEY BOARD (A FF)
S706	1-554-303-21	SWITCH, KEY BOARD (A REW)
S707	1-554-303-21	SWITCH, KEY BOARD (A STOP)
S708	1-554-303-21	SWITCH, KEY BOARD (B FWD)
S709	1-554-303-21	SWITCH, KEY BOARD (B REV)
S710	1-554-303-21	SWITCH, KEY BOARD (B FF)
S711	1-554-303-21	SWITCH, KEY BOARD (B REW)
S712	1-554-303-21	SWITCH, KEY BOARD (B STOP)
S713	1-554-303-21	SWITCH, KEY BOARD (B REC)
S714	1-554-303-21	SWITCH, KEY BOARD (B PAUSE)
S715	1-554-303-21	SWITCH, KEY BOARD (B REC MUTE)
S716	1-570-849-11	SWITCH, SLIDE (DOLBY NR)
S717	1-570-837-11	SWITCH, SLIDE (DIRECTION)
S920	⚠1-553-318-41	SWITCH, PUSH (AC POWER)(1 KEY)(POWER)
T81	1-433-331-11	TRANSFORMER, BIAS OSCILLATION
T901	⚠1-450-063-11	(AEP,UK,WG,IT)...TRANSFORMER, POWER
T901	⚠1-450-064-11	(E,EA,AUS).......TRANSFORMER, POWER
VS901	⚠1-571-722-11	(E,EA,AUS)...SWITCH, VOLTAGE SELECTION (VOLTAGE)
X313	1-577-101-11	VIBRATOR, CERAMIC 4.19MHz
X701	1-577-358-21	VIBRATOR, CERAMIC 4MHz

ACCESSORY & PACKING MATERIAL

1-465-455-11	REMOTE COMMANDER (RM-S530)
1-501-369-11	(AEP,IT)......ANTENNA
1-501-374-11	(AEP,WG,IT)...ANTENNA, LOOP
1-575-668-11	CORD (WITH CONNECTOR)
3-751-553-11	(AEP).........MANUAL, INSTRUCTION
3-751-553-41	(AEP,WG,IT)...MANUAL, INSTRUCTION
3-707-584-01	COVER, BATTERY (for RM-S530)
*4-914-075-01	(AEP,WG,IT)...CUSHION (SP)
*4-935-383-01	CUSHION
4-921-934-01	SHEET, PROTECTION
*4-937-346-01	(AEP,WG,IT)...INDIVIDUAL CARTON

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

SS-A502

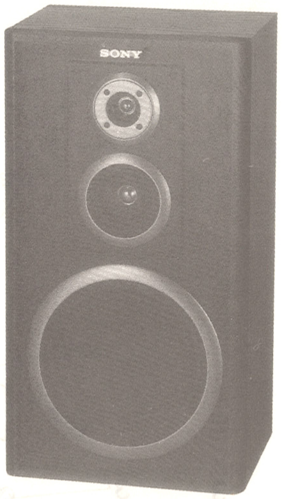
SERVICE MANUAL

AEP Model
UK Model

SPECIFICATIONS

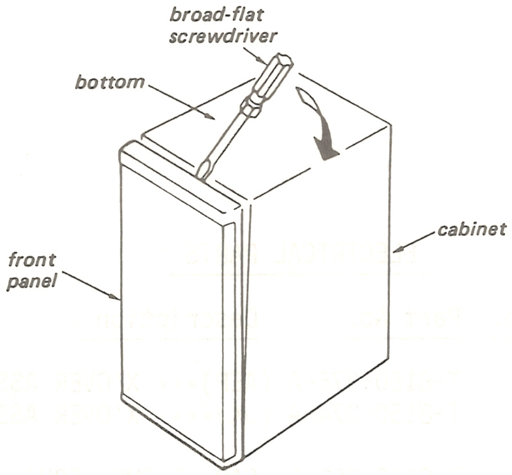
Speaker system	3-way speaker system
Speaker units	Woofer: 16 cm, cone type Midrange: 6 cm, cone type Tweeter: 1.6 cm, dome type
Enclosure type	Acoustic suspension
Nominal impedance	6 ohms
Power handling capacity	Music 120 W
Sensitivity	88 dB (1 W, 1 m), 6.3 W (96 dB, 1 m)
Frequency range	45 Hz to 20,000 Hz
Dimensions	Approx. 250 x 461 x 196 mm (w/h/d)
Weight	Approx. 4.7 kg per speaker, net Approx. 10 kg in shipping carton

Design and specifications subject to change without notice.



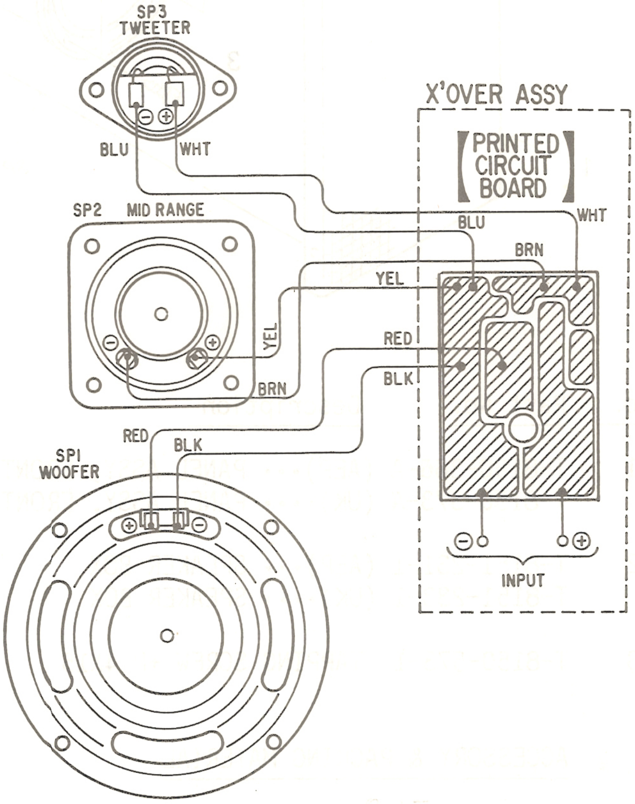
This set is the speaker system in LBT-V502.

1. FRONT PANEL REMOVAL


broad-flat screwdriver
bottom
cabinet
front panel

Note: Be careful not to scratch the cabinet.

2. WIRING DIAGRAM


SP3 TWEETER
BLU
WHT
X'OVER ASSY
PRINTED CIRCUIT BOARD
SP2 MID RANGE
BLU
WHT
BRN
YEL
YEL
RED
BLK
BRN
RED
BLK
SPI WOOFER
INPUT

SPEAKER SYSTEM

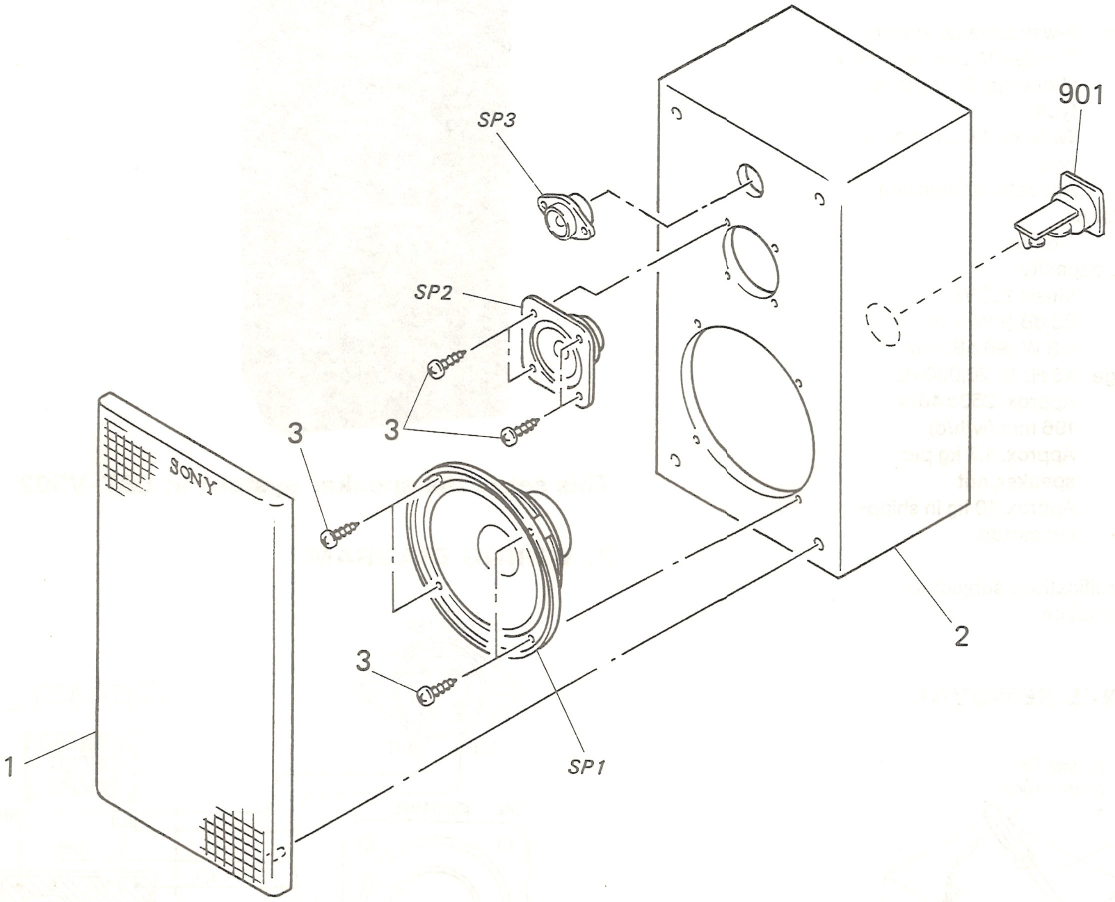
SONY®

MICROFILM

3. EXPLODED VIEW AND PARTS LIST

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.



No.	Part No.	Description
1	T-8150-366-A (AEP)···	PANEL ASSY, FRONT
	T-8150-373-A (UK)····	PANEL ASSY, FRONT
2	T-8151-231-1 (AEP)···	SPEAKER BOX
	T-8151-233-1 (UK)····	SPEAKER BOX
3	T-8150-573-1	TAPPING SCREW +P 4X15

ACCESSORY & PACKING MATERIAL

T-8151-236-1 (AEP)···
MANUAL, INSTRUCTION
T-8151-195-1 (UK)····
MANUAL, INSTRUCTION

ELECTRICAL PARTS

Ref.No.	Part No.	Description
901	T-8150-376-A (AEP)···	X'OVER ASSY
	T-8150-374-A (UK)····	X'OVER ASSY
C 1	T-8110-253-1	CAP 2.2MF 50V
SP1	T-8110-443-1	WOOFER
SP2	1-544-046-11	MID RANGE
SP3	1-544-135-21	TWEETER

9-955-829-11

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Audio Group

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